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UNIVERSITY OF ALBERTA

USE OF THE EMERGENCY DEPARTMENT  
BY THE NONURGENT PEDIATRIC PATIENT

BY

CORRINE TRUMAN



A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES  
AND RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF MASTER OF NURSING

FACULTY OF NURSING

EDMONTON, ALBERTA

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled USE OF THE EMERGENCY DEPARTMENT BY THE NONURGENT PEDIATRIC PATIENT submitted by CORRINE TRUMAN in partial fulfillment of the requirements for the degree of MASTER OF NURSING.

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Dr. Herbert Northcott

Date: 13 April 1993

# DEDICATION

To my parents, Jean and Lorne Hockridge,  
who encouraged me to challenge myself.

To my husband Roger and my sons Evan and  
Colin for their patience, love and support.

# ABSTRACT

The purpose of this study was to identify family attributes and to explore the care-giving and care-seeking behaviours of parents who bring their children to the emergency department (ED) for nonurgent care. The study employed a cross-sectional survey design using a convenience sample of 114 parents at a Western Canadian hospital. Data were collected during January 1992, using a semi-structured self-administered questionnaire and a retrospective chart audit. Nonparametric statistics and content analysis were used to analyze the data.

The findings suggest that this ED functioned predominantly as an adjunct to the community physician for a broad cross-section of families both in the immediate area surrounding the ED and in adjacent communities. Seventy percent of the visits were classified as ED self-referrals and 30% as professional ED referrals. Professional referrals were generated by community physicians, ED physicians and ED nurses.

The children presented with a broad range of symptoms, the most common being fever. Most parents were either unsure of, or overestimated, the seriousness of these symptoms. Printed material on childhood illness or injury was not a major source of at-home treatment information. Two thirds of parents tried comfort measures or medications at home. Less than one third sought lay advice before bringing their children to the ED; those consulted tended to

refer the parents to physicians.

Over one half of parents did not consider using community alternatives to the ED, and three quarters did not try to contact physicians by telephone before coming to the ED. The parents' decision to use the ED was influenced by their perceptions of the seriousness of symptoms, physician unavailability, convenience, the parents' belief that EDs provide better services than community alternatives, and that their children required the resources of the ED.

The study concludes with the suggestion that nonurgent pediatric ED use is an indirect measure of the perceived availability, accessibility, and acceptability of community based diagnostic and treatment alternatives. Expanded nursing roles both in the ED and in the community which would address the "problem" of nonurgent pediatric ED use are identified.



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## CHAPTER I - INTRODUCTION

Agnew (1974) tells us that, in the "old days", nobody ever thought of going to the hospital directly for the odd ache or pain. People either sought their own doctor or made the rounds of the offices. This is not so today. In Canada, as in most other western countries, the last thirty years have produced marked changes in how often and for what purpose the public uses hospital emergency departments (EDs) (Baltzan, 1972; Chaiton, 1975; Davidson, 1978; Silver, 1966). Demand for ED services has increased more rapidly than for any other ambulatory health care service, and a large part of this increase has been due to individuals seeking treatment for illnesses or injuries not requiring the resources of the ED. These individuals can at times account for one quarter to two thirds of the total number of visits made to an ED (Berman & Luck, 1971; Jacoby & Jones, 1982; Lee, Solon & Sheps, 1960; Perkoff & Anderson, 1970; Stratman & Ullman, 1975; Wartmen, Taggart & Palm, 1984).

These changes in ED use are of concern for three reasons. First, when compared to similar care provided within a community setting, EDs provide low quality, hurried, fragmented care at considerable expense (Bain & Johnson, 1971; Barnett & Rodnick, 1979; Brook & Stevenson, 1970; Brook, Berg & Schechter, 1973; Crippen, 1985; Heagarty, Robertson, Kosa & Alpert, 1970; Kahn,

Anderson & Perkoff, 1973; Orr, Charney, Straus & Bloom, 1991; Reilly, 1981; Roth, 1972; Satin & Duhl, 1972). ED visits cost three times as much as family physician visits, with the estimates of their indirect cost running much higher (DeAngelis, Fosarelli & Duggan, 1985). Emergency department care has been shown to result in more frequent use of laboratory tests and x-rays, increased rates of hospitalization, more surgical procedures and greater numbers of return visits (Alpert, Heagarty, Robertson, Kosa & Haggerty, 1968).

The second reason to question this type of ED use is that EDs lack the physician, nurse and institutional preparedness to act as family physician substitutes (Alpert & Feinbloom, 1974; Brook, Berg & Schechter, 1973; Crippen, 1985; Wolcott, 1979). ED physicians and pediatricians are educated with a different focus than are family physicians. ED physicians and pediatricians accept a physiological and biochemical basis of practice as opposed to a sociological base focused on family health (Silver, 1963).

In addition, ED nursing does not reflect the changes in ED use that have taken place over the last thirty years. Nurses employed in EDs are selected and educated with the expectation that they will deal with emergencies, yet emergencies account for an average of 5% of an ED's total patient census (Andreoli & Musser, 1985; Jones, Yoder &



Jones, 1984). Emergency department nurses continue to be assigned on a "functional" basis in which the highest priority task is performed by the first available nurse (Blair, Sprager, Walts & Thompson, 1982).

The result of this incongruence between the type of patients that are encountered in EDs and the type of patients for which EDs are designed and staffed is that highly trained ED physicians with years of residency training and specialty board certification are treating and triaging patients at a family physician level in an institution designed for the quick efficient treatment of individuals with acute life-threatening illness or injuries. Moreover, they are doing so with at times hostile nurses who view these patients as not belonging in the ED (Crippen, 1985; Wolcott, 1979).

The third reason for questioning the continued acceptance of the use of the ED for the treatment of illnesses or injuries not requiring its resources is that the increased numbers of patients not requiring the resources of the ED contribute to overcrowding and long waiting periods. They detract from and affect the quality of care that should be provided to those who require emergency services (Driscoll, Vincent & Wilkinson, 1987).

Since the late 1950s, considerable research has been conducted into the public's use of EDs for the treatment of illnesses or injuries not requiring the resources of the ED.



Much of this research has focused on describing ED users and identifying their attributes. Less research has focused on exploring the decision process leading up to their use of the ED, and very little has dealt with at-home care-giving behaviours preceding ED use.

Much of the research into the public's use of the ED has been conducted in the United States and has tended to focus on adult ED use. Considerably less has been conducted in Great Britain and Canada. Of the research that has been conducted in Canada only a few studies have focused on ED use by children and/or minority populations. The results of studies conducted in the United States and Great Britain may not be directly applicable to Canada due to the differences in the funding and organization of health care services in these countries.

This study of use by children not requiring the resources of the ED is both relevant and timely. Now, more than ever before, the public's use of health care is being examined, not only in Canada but in most industrialized countries. Difficult decisions about the allocation of health care funds will need to be made in the near future.

Since the 1980's, the funders of ED care have begun to focus on modifying ED use for the treatment of conditions not requiring the resources of the ED through the use of triage, controlled access, and third party payment schemes (Badgett, 1986; Bonham & Barber, 1987; Chan, Galaif, Kushi,

Bernstein, Fagelson & Drozd, 1985; Glotzer, Sager, Socolar & Weitzman, 1991; Hansagi, 1990; Hansagi, Allebeck & Edhag, 1989; Hansagi, Carlsson, Olsson & Edhag, 1987; Hansagi, Edhag & Allebeck, 1991; Hurley, Freund & Taylor, 1989; Muller, 1990; Shaw, Selbst & Gill, 1990; Straus, Orr & Charney, 1983). In Canada, two provinces, New Brunswick and Quebec, have recently introduced ED user fees. In addition, freestanding extended-hour clinics, referred to in the United States as "emergency clinics", "ambulatory care centres" or "urgent clinics", and in Canada as "walk-in clinics", have been recently introduced. These clinics are increasingly being used by individuals who would have previously used EDs. In the United States, it has been estimated that use of these clinics has contributed to a 16% drop in ED use (Hellstern, 1987). A report prepared by the Government of Alberta (1989) suggests that the advent of walk-in clinics in Alberta may be linked to the provincial decrease in ED use that occurred between 1987 and 1989.

The role that an individual ED assumes within its community is dependent upon the perceived needs of the community within which it is located and the perceived accessibility and acceptability of physicians within that community (Torrens & Yedwab, 1970). Therefore, efforts to address ED use for the treatment of conditions not requiring these resources must be based on an understanding of ED use within the context of individual hospitals and the

communities they serve.

The purpose of this study is to add to our understanding of the use of the ED for the treatment of an illness or injury not requiring the resources of the ED, particularly as it relates to the pediatric population. This information may be useful in planning appropriate health care services within the community. The following two research questions will be addressed:

- (a) What are the attributes of families who bring their children to the ED of a large urban hospital in western Canada for the treatment of conditions not requiring the resources of the ED?
- (b) What are the care-giving and care-seeking behaviours leading up to their decision to use the ED?

The following chapter contains a review of the literature pertaining to emergency department use for the treatment of illnesses or injuries not requiring the resources of such a facility.

## CHAPTER II - LITERATURE REVIEW

Parents exhibit all sorts of help-seeking behaviours when their children are ill or injured. They may telephone a pharmacist, make an appointment with a family physician, ask "Aunt Martha" for advice, take their child to a walk-in clinic, read "A Parent's Guide to Childhood Illness", or bring their child to an emergency department (ED). Understanding and predicting when they will use health care services has been and continues to be of great interest to those responsible for planning, delivering, and funding health care.

Four researchers have been especially prominent in the development of models of help-seeking for medical care: Andersen and Aday (1978), Rosenstock (1966), Suchman (1965), and Mechanic (1962; 1964). Andersen and Aday's model may be termed a "prediction" model, whereas Rosenstock, Suchman and Mechanic have developed "process" models (Cockerham, 1986). The purpose of prediction models is to maximize the amount of variance explained. These models, therefore, are useful for describing what variables predict patterns of health care use. Process models, as opposed to prediction models, seek to explain why certain variables such as help-seeking behaviours for medical care occur, by measuring the perceptual processes guiding help-seeking behaviours. Of these four models, Andersen's has been used in several

studies of health service use and has shown modest success in accounting for variance in physician utilization on the basis of sex, age, education of head of household and having a regular source of care (Cockerham, 1986). None of these models, however, have been applied to help-seeking for medical care within the context of the ED. Most of the research that relates to help-seeking for medical care within the context of the ED has been cross-sectional and descriptive in nature. Historically, there have been two separate areas of focus: research describing ED users, and research exploring the decision process leading up to use of the ED. The review of the literature in this chapter is organized around these two areas of focus.

#### Description of Emergency Department Users

The first analysis of an individual hospital's ED patient population was conducted at Beth Israel Hospital in Boston by Lee, Solon and Sheps (1960). A retrospective chart audit was used to collect sociodemographic data (age, sex, socioeconomic status), information on past hospital use, and diagnostic and treatment information. In-house physicians classified the ED visits as emergent, urgent, or nonurgent, using the criteria presented below. This classification system, which has become known as the IRIS classification system, has been widely used in other ED studies.



- Emergent:** condition requires immediate medical attention; time delay is harmful to patient; disorder is acute and potentially threatening to life or function.
- Urgent:** condition requires medical attention within the period of a few hours; there is possible danger to the patient if medically unattended; disorder is acute but not necessarily severe.
- Nonurgent:** condition does not require the resources of an emergency service; referral for routine medical care may or may not be needed; disorder is nonacute or minor in severity.

The results of the analysis showed that this ED was being used by males and females of every age and by people from every category of the socioeconomic scale. A total of 38% of the visits were made for nonurgent conditions, and two thirds of all the visits were made for non-accident related causes. Two groups of patients were identified: (a) those without family physicians who relied heavily on the hospital for medical care, and (b) those with private physicians who relied less on the hospital for medical care (Solon, Sheps & Lee, 1960a, 1960b; Solon, 1966).

Since their work was published, many other cross-sectional descriptive studies of individual ED populations have been undertaken. The majority of these studies were conducted in the United States (Alpert, Kosa, Haggerty, Robertson & Heagarty, 1969; Berman & Luck, 1971; Iott, Webb, Thompson & Pearson, 1974; Kirkpatrick & Taubenhaus, 1967; Kluge, Wegryn & Lemley, 1965; Lavenhar, Ratner & Weinerman, 1968; Perkoff & Anderson, 1970; Ullman, Block & Stratmann,

1975; Walker, 1975; Weinerman, Ratner, Robbins & Lavenhar, 1966; White & O'Connor, 1970; Wingert, Friedman & Larson, 1968a, 1968b). Others were carried out in Great Britain (Fry, 1960; Nuffield, 1960) and in Canada (Bain & Johnson, 1971; Robinson, Kinnis, Anderson, Argue & Miller, 1969; Robinson & Klonoff, 1967; Telglas, 1969; Vayda, Gent & Paisley, 1975).

These studies used retrospective chart audits and questionnaires to gather sociodemographic data (age, sex, education, income, occupation, marital status, race, ethnicity, place of residence, years at current address), information on past use of medical services (if the patient has a family physician, number of previous ED visits, method of payment), and information about the ED visit (the day of the week and the time of day, referral patterns, the urgency of the visit, the time required for disposal of cases, the discharge diagnosis, and the disposition of cases). The results of these studies showed that, although most individuals used EDs infrequently, those who used them for the treatment of nonurgent conditions accounted for 25-70% of the total patient census. In the Canadian studies, nonurgent ED users accounted for from 35% to 55% of ED users (Bain & Johnson, 1971; Vayda, Gent & Paisley, 1975). Nonurgent ED users overall were found to vary in their sociodemographic profiles and in their past use of medical services. However, as in the study by Lee, Solon & Sheps



(1960), two groups of nonurgent ED users were identified: those for whom the ED functioned as a "family physician" and those for whom it functioned as a "physician substitute". The first group were characterized as belonging to minority groups, of lower socioeconomic status, often unemployed or on welfare, frequently single parents having medicaid coverage, living close to the hospital and having no stable relationship with a family physician. These individuals tended to make repeated use of the ED to meet health care needs not requiring the resources of the ED.

The second group, for whom the ED functioned as a "physician substitute", were predominantly white, of higher socioeconomic status, having health insurance, and a stable relationship with a family physician. These individuals made less nonurgent use of the ED than the first group, but they did so on both a self-referral and a professional-referral basis. The self-referral ED users in this group used the ED as a quick convenient place to obtain medical care when they chose not to use their family physicians, were unable to reach them, or were unable to make an office appointment with them as quickly as they felt necessary. The professional-referral ED users in this group were sent to the ED by physicians when their offices were heavily booked or closed, or when physicians chose to meet their patients at the ED for assessment and treatment.

The proportion of ED users in the first group (i.e.,

those for whom the ED functioned as a family physician) varied according to the country in which the study was undertaken and according to the characteristics of the community served by the ED. The studies conducted in Great Britain (Fry, 1960) and in Canada (Bain & Johnson, 1971; Robinson, Kinnis, Anderson, Argue & Miller, 1969; Robinson & Klonoff, 1967; Telglas, 1969; Vayda, Gent & Paisley, 1975) had proportionately fewer numbers of ED users in the first group than did those undertaken in the United States. In a comparison of American and Canadian EDs, Vayda, Gent and Hendershot (1975) found that the proportion of ED users in the first group ranged from a high of 60% in some of the American inner-city EDs to a low of 10% in some of the Canadian EDs.

The Canadian studies found that ED users tended to be representative of the community served by the ED in terms of their sociodemographic profiles (age, sex, socioeconomic status, education and ethnicity) and past use of medical services (Bain & Johnson, 1971; Robinson, Kinnis, Anderson, Argue & Miller, 1969; Robinson & Klonoff, 1967; Telglas, 1969; Vayda, Gent & Paisley, 1975). Almost 90% had family physicians and almost all had health insurance. As might be expected, Beck (1973) found that the proportion of ED users for whom the ED functioned as a family physician, compared to those for whom the ED functioned as a physician substitute, decreased in Canada when universal medical

insurance was introduced.

Further insight into hospital location as a determinant of nonurgent ED use was provided by findings from the studies conducted at several hospitals simultaneously (Jacobs, Gavette & Wersinger, 1971; Jones, Jones & Yoder, 1982; Roth, 1971; Torrens & Yedvab, 1970; Vayda, Gent & Hendershot, 1975).

Hospital EDs serving similar populations in terms of sociodemographics and usual source of medical care functioned differently depending on how the physicians in the community used the ED. In some communities the ED was used as an after-hours office for the physicians, while in other communities, these after-hours office services were provided by community facilities other than the ED (Jones, Jones & Yoder, 1982).

Most emergency department studies have been conducted using samples comprised of all ED users or adults only. Only a limited number of studies have addressed the issue of nonurgent ED use by children. In the United States, five such studies were identified: Bergman and Haggerty (1962), DeAngelis, Fosarelli and Duggan (1985), Kahn, Anderson and Perkoff (1973), and Wingert, Friedman and Larson (1968a, 1968b). Fewer Canadian studies have addressed this issue (Read, 1966; Robinson, Kinnis, Anderson, Argue and Miller, 1969; and Robinson & Klonoff, 1967). These American and Canadian studies again identified two groups of nonurgent ED

users: those who used the ED in place of a family physician, and those who used it as a physician substitute.

Those who used the ED in place of a family physician were more likely to be of low socioeconomic status, be single parent families, and have more children per family than those in the second group. The group using the ED as a physician substitute made more frequent use of the ED during the evening and on weekends, whereas, for those who used the ED as a family physician, no difference was found in relation to day or time of ED use.

Of the three Canadian studies of pediatric nonurgent ED use, two were conducted before universal medical insurance was introduced (Read, 1966; Robinson & Klonoff, 1967). Read (1966) found that about 50% of the families had family physicians, and that of those who did have a family physician about 50% tried to contact her/him before coming to the ED. In contrast, Robinson, Kinnis, Anderson, Argue and Miller (1969), studying families after the introduction of medical insurance in British Columbia, found that 90% of families in his sample had a physician, and that of the families who did have a family physician 56% tried to contact her/him before coming to the ED. In short, it appears that although the proportion of families with physicians increased (after the introduction of universal medical insurance), the proportion who tried to contact their physician before coming to the ED did not change to

any great extent. Convenience seems to also contribute to the likelihood of calling physicians, as those living less than three miles from the ED were less likely to contact physicians before arriving than those living farther than three miles from the ED.

#### Decision to Use the Emergency Department

While the studies of nonurgent ED use that were conducted in the 1960s and the early 1970s focused on identifying attributes of nonurgent ED users, those conducted since the late 1970s have focused on factors contributing to the individual's decision to use the ED for nonurgent care. Since the late 1970s, research in the area of help-seeking for medical care has shifted from a "prediction" to a "process" mode.

Several studies have identified the reasons for individuals and/or families choosing to use the ED for nonurgent care rather than using a community alternative such as a physician's office or a walk-in clinic. The majority of these studies have been conducted in the United States (Habenstreit, 1986; Hilker, 1978; Kelman & Lane, 1976; Smith & McNamara, 1988; Vaughan & Gamester, 1966; Wabschall, 1983) and in Great Britain (Bellavia & Brown, 1991; Davison, Hildrey & Floyer, 1983; Fisher, 1981; Foroughi & Chadwick, 1989; Holohan, Newell & Walker, 1975; Morgan, Walker, Holohan & Russel, 1974; Myers, 1982; Wilkinson,



Kazantzis, Williams, Dewar, Bristow & Miller, 1977). Only one study was conducted in Canada (Vayda, Gent & Paisley, 1975).

All of these researchers used cross-sectional descriptive designs and collected data through the use of self-administered structured and semi-structured questionnaires or interviews. In most of the studies the IRIS classification system was used to identify nonurgent ED users. A summary of reasons for ED use identified in these studies is presented in Table 2.1 below.

In 12 of the 15 studies, convenience was identified as a reason for using the ED. Included as convenience reasons were: the ED was closer, quicker, or more accessible than community alternatives; the individual happened to be in the hospital anyway; the user did not have a telephone; the individual did not want to lose time from work; or the ED had a pharmacy available. Unavailability of a physician was identified in 11 of the 15 studies. This category included reasons such as inability to reach physician by telephone, physician's office was closed, the user was unable to make an appointment as "quickly" as was felt necessary, or the user was referred to the ED by a physician or her/his nurse/secretary. In nine studies, ED users perceived that they would require services available only in the ED (such as "stitches", an x-ray, or an injection). The seriousness of the illness or injury was indicated as a reason for



Table 2.1 Summary of Care-Seeking Studies

| Reasons for Using the ED         | Studies |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                  | A       | B | C | D | E | F | G | H | I | J | K | L | M | N | O |
| Convenience                      | *       | * |   | * | * |   | * | * | * | * | * |   | * | * | * |
| Physician Unavailability         | *       | * | * |   |   | * |   | * | * | * | * | * | * |   | * |
| Seriousness of Illness or Injury |         | * | * | * |   | * | * | * |   |   | * |   | * |   | * |
| Need for Services Provided       | *       | * |   | * |   | * | * | * | * | * |   |   |   | * |   |
| Poor Quality of Care Elsewhere   | *       |   | * |   | * | * | * |   | * |   |   | * |   | * |   |
| Cost                             |         |   |   |   |   | * |   | * |   |   | * |   | * |   |   |
| No Physician                     |         |   | * |   | * |   |   | * |   |   |   |   |   |   | * |
| Past ED Use                      |         |   |   |   |   | * |   |   |   | * |   |   |   |   |   |

(A) Bellavia & Brown (1991)  
 (B) Davison, Hildrey, & Floyer (1983)  
 (C) Fisher (1981)  
 (D) Foroughi & Chadwick (1989)  
 (E) Habenstreit (1986)  
 (F) Hilker (1978)  
 (G) Holohan, Newell, & Walker (1975)  
 (H) Kelman & Lane (1976)

(I) Morgan, Walker, Holohan, & Russel (1974)  
 (J) Myers (1982)  
 (K) Smith & McNamara (1988)  
 (L) Vaughan & Gamester (1966)  
 (M) Vayda, Gent, & Paisley (1975)  
 (N) Wabschall (1983)  
 (O) Wilkinson, Kazantzis, Williams, Dewar, Bristow, & Miller (1977)

choosing to use the ED in nine of the 15 studies. Poor quality of care provided elsewhere was indicated as a reason for choosing the ED in eight studies. This category included the ED user's perception that ED physicians provided better service or that the ED equipment was better than that found in community alternatives. In five studies, all of which were conducted in the United States, personal out-of-pocket cost of the services incurred in a physician's office or a walk-in clinic was indicated as a reason for using the ED. Other reasons which were identified in less than one third of the studies were not having a family physician to contact (4 studies), and previous use of the ED (2 studies).

Only three of the above studies, all American, dealt directly with nonurgent ED use by children. Hilker (1978) found that the parents of nonurgent users could be classified into three groups: those who had a private physician but were frustrated in their attempts to schedule an appointment for their child, those who preferred to use the ED for primary care of their children, and those who had been directed to the ED by members of the health care profession. Findings based on a sample of 652 ED visits by children (in this study, those under twenty-one years of age) showed that most of the parents lived within fifteen minutes travel of the ED; that they arrived at all times of the day, and that 66% of the visits were self-referrals and

24% were professional referrals (Hilker, 1978). The remaining 10% were referred to the ED by friends and relatives. Although 80% of the children had a family physician or pediatrician, only 38% tried to contact her/him before arriving at the ED. Of those who did contact their family physician or pediatrician, one half were told to go to the ED. Past ED use, the parent's belief in the seriousness of the child's illness or injury, physician unavailability, the parent's belief that their child required the services provided by the ED, their perception of the poor quality of care provided elsewhere, and the cost of using community alternatives were identified as factors affecting their decision to use the ED.

Smith and McNamara (1988) surveyed 150 children, fifteen years of age or less, who used the Brockton Hospital ED in Massachusetts for the care of minor illness episodes on weekdays between 0900 and 1600 hrs. They found that 33% of the children in their sample did not have a family physician or pediatrician. Those children who did not have a family physician or pediatrician tended to be older, less likely to have insurance coverage, and more likely to belong to a minority group than did those children who had a family physician or pediatrician. Thirty-two percent of all the parents in the study chose to bring their children to the ED because they thought the children were too sick to wait for an office visit, 20% said they were unable to contact their

family physician or pediatrician (even though the sample consisted of "day users"), 17% felt it was more convenient than community alternatives, and 17% indicated that it cost them less to come to the ED. Ten percent of the children were referred to the ED by family physicians or pediatricians.

Wabschall (1983) used a cross-sectional survey to identify the characteristics of 59 families who brought infants under the age of two months to the ED for nonurgent care and to identify the situational factors that entered into their decision. A large proportion of the parents in her sample were unmarried mothers of lower socioeconomic status with more than one child. Convenience, the parent's belief that their child required the services provided by the ED, and their perception of the poor quality of care provided elsewhere were identified as factors affecting their decision to use the ED. Although 85% of the infants had a family physician or pediatrician, only 51% of the parents tried to contact her/him before coming to the ED. In comparing the three studies of pediatric nonurgent use with adult nonurgent use, there appeared to be little difference in the pattern of reasons that adult ED users gave for deciding to use the ED and the pattern of reasons that parents gave for deciding to bring their children to the ED.

### Summary

The overall conclusion drawn from this literature review is that EDs serve different populations in different ways. The role that an ED fulfils is dependent upon the perceived needs of the community within which the ED is located and the perceived accessibility and acceptability of alternatives to the ED within the community. There has been little Canadian research that explored nonurgent pediatric ED use and the research that has been completed was conducted in the 1960s and 1970s in Ontario and British Columbia.

To my knowledge no Canadian studies have focused on pediatric ED use by minority populations or on the caregiving and care-seeking behaviours preceding nonurgent pediatric ED use. Understanding why parents use the ED rather than a community based alternative such as a physician's office or a walk-in-clinic is an integral part of planning, delivering and funding ED services. This study will add to our understanding of nonurgent pediatric ED use in Canada, and as such may provide information that could be useful in planning pediatric health care services within the community in which the study was conducted.

The following chapter contains a description of the method used for this study.



### CHAPTER III - METHOD

In this study, a cross-sectional survey design was used to identify the attributes of families who brought their children to the emergency department (ED) of a large urban hospital in western Canada for the treatment of an illness or injury not requiring the resources of an ED, and to identify the care-giving and care-seeking behaviours leading up to their decision to use the ED. In this chapter the methodology used in this study is presented. First, operational definitions of three terms are provided: parent, child, and condition not requiring the resources of the ED. Then the setting of the study, the development of the data collection instruments, the sample selection process, and the data collection process are described. Following this, analysis of the data is discussed. The chapter concludes by addressing ethical implications of the study.

#### Operationalization of Terms

**Parent:** This includes the child's mother, father, step-parent, guardian, mother's or father's common-law spouse or foster parent.

**Child:** This includes a male or female who has not yet reached his/her sixteenth birthday and who cannot be classified as an emancipated minor.



**Condition Not Requiring the Resources of the ED:** This includes self-limiting or minor illnesses or injuries which could be treated at home or by a family physician or pediatrician in the community. In this ED all attending physicians are required to indicate on the ED chart if the ED visit was emergent, urgent, or nonurgent. This is done using the classification guidelines developed by the chief ED physician (see Appendix A). These guidelines reflect the IRIS classification system mentioned in the previous chapter.

**Emergent:** condition requires immediate medical attention; time delay is harmful to patient; disorder is acute and potentially threatening to life or function.

**Urgent:** condition requires medical attention within the period of a few hours; there is possible danger to the patient if medically unattended; disorder is acute but not necessarily severe.

**Nonurgent:** condition does not require the resources of an emergency service; referral for routine medical care may or may not be needed; disorder is nonacute or minor in severity.

Included in the nonurgent category, for example, are: ligamentous strains, muscle strains, upper respiratory tract infections, conjunctivitis, feeding problems, colic, anxiety states, functional abdominal pain (bowel spasm, constipation), menstrual disorders, costochondritis, abrasions, contusions, minor lacerations, vaginitis, cystitis, dermatologic disorders, migraine headaches, tension headaches and gastroenteritis. For the purposes of this study, a condition not requiring the resources of the

ED was operationalized as a nonurgent ED visit as indicated by the attending physician.

### Setting of the Study

This emergency department was chosen as a setting for two main reasons. First, my previous employment as a staff nurse in the ED provided knowledge of the ED and its personnel which allowed for ease in both planning and conducting the study. Second, the ED's location in a diverse multi-cultural community containing large numbers of young families provided an opportunity to address the two gaps found in the Canadian literature, namely, nonurgent pediatric ED use and ED use by minority populations.

The community (pop. 77,000) served by this ED is bordered on the north and west by industrial areas and on the south and east by freeways. The ED is located within a 300 bed hospital in the centre of the community. According to the Provincial Medical Directory, fifty-two family physicians and seven pediatricians practice within the community. Three extended-hour walk-in clinics, a family medical centre, and a health centre are also located in the community.

The extended-hour walk-in clinics provide daily, no-appointment necessary, physician availability from 0830 hrs. to 2300 hrs. as well as day and evening x-ray and laboratory service. The pediatricians provide

appointment only office hours on weekdays. The family medical centre, which is located in the hospital beside the ED, provides weekday appointment only service between 0900 hrs. and 1700 hrs. The health centre provides weekday 0830 hrs. to 1630 hrs. health care (largely nursing) services focusing on health promotion and illness prevention. The community also contains several freestanding laboratories and x-ray facilities which offer day, evening, and weekend services.

Twenty-four hour medical coverage at the ED is provided on a rotational basis by eight fee-for-service in-house casualty officers. Six of the pediatricians who practice within the community, in conjunction with another pediatrician whose practice is located elsewhere in the city, provide 24 hour on-call ED coverage on a rotational basis for their own and their colleagues' patients, as well as referral service for the ED casualty officers.

A satellite community with a population of 40,000 is located to the northeast of this community. This satellite community is serviced by several family practice physicians and four walk-in clinics; however, no ED is located within this community.

#### Development of the Data Collection Instruments

Two data collection instruments were used in this study: (a) a self-administered, combination structured and

semi-structured questionnaire, available in three languages (English, Chinese and Punjabi); and (b) a retrospective chart audit. English, Chinese and Punjabi are the three most prominent mother tongues spoken by the individuals in the community surrounding the ED.

I developed the ten page questionnaire, which included a total of 53 questions, based on the literature review of ED use and according to Dillman's (1978) recommendations for questionnaire design. The questionnaire (see Appendix B) was divided into two sections: (a) information about the child's illness or injury and the parent's care-giving and care-seeking behaviours before arrival at the ED, and (b) sociodemographic data about the child's family. According to the "Right Writer" computer programme, the questionnaire was rated at a grade seven reading level.

The questionnaire was reviewed for face validity by three ED nurses and a University of Alberta master's student completing thesis work in the area of nonurgent ED use. Three parents who had recently taken their children to an ED for minor illnesses or injuries were then asked to complete the questionnaire on a retrospective basis. Based on their responses minor changes were made to the questionnaire, following which it was translated into Punjabi and Chinese (written Chinese is the same regardless of the dialect). These translations were verified by having the questionnaires retranslated into English by different

interpreters. The translated questionnaires were then pre-tested with two Chinese and two Punjabi parents. In all three languages, the questionnaires appeared to elicit the appropriate information and were completed with ease in approximately twenty minutes or less.

The chart audit data collection form was developed to augment the information collected via the questionnaire. The child's age and address, the child's medical treatment while in the ED, the physician's final diagnosis and his/her rating of the seriousness of the child's illness or injury, and the day and time of the ED visit were collected from the chart.

#### The Sample Selection Process

The sample was selected in two stages. The first stage involved sample selection by the emergency department admission clerks while completing the child's ED admission chart. When a parent gave permission (by signing the ED chart) for a child under the age of sixteen to be treated, the admission clerk handed the parent a numbered brown envelope containing an information sheet (see Appendix C) and a copy of the questionnaire. The information sheet introduced me and provided the parent with information about the study including its purpose, the parent's part in the study, how questions could be answered, how the data would be used, how anonymity and confidentiality would be



protected, and how to obtain a summary of the results.

The ED admission clerk then placed an identification sticker (which is routinely printed along with the ED chart) on a separate recording sheet (see Appendix D). The admission clerk was instructed to then record, beside this sticker, the number of the envelope which he/she had given to the parent. This recorded number provided the means by which I matched the completed questionnaire, which signified consent to participate in the study, to the appropriate ED chart. In three cases the admission clerk failed to do this and the questionnaires were discarded.

The admission clerks were instructed not to give copies of the information sheet and questionnaire to those parents whose children were sent directly to the nursing desk for immediate medical care as per the Guidelines for Triaging Patients to Emergency from Emergency Admitting without an Emergency Chart (see Appendix E), nor to the parents of children who were returning to the ED for repeat intravenous antibiotic therapy. These were the only two exclusion criteria during the first stage of the sample selection process.

For parents who used the ED on more than one occasion during the data collection period, separate questionnaires for each visit were to be provided. If a visit involved more than one child being seen in the ED at one time, the ED admission clerk was instructed to write "multiple children"



on the recording sheet and to give the parent one questionnaire for each child. However, no children were selected in this stage of the sample selection process who had previously used the ED during the data collection period and no "multiple children" were recorded.

Before the study began, the first stage of the sample selection procedure received the approval of the Admitting and Discharge Planning manager of the hospital under whom the ED admission clerks function. I then sent a memo to the ED admission clerks enlisting their help, instructing them about their part in the study, and asking them to contact me by telephone should they have any concerns or questions about the study. In addition, I made arrangements to be available in the ED admission area to review the procedure with the clerks individually at the beginning of their shifts. Despite this preparation and frequent in-person and telephone contacts with the ED clerks during the collection period, only 331 (27.9%) of the parents who met the criteria for admission to the study during the data collection period received information sheets and questionnaires from the admission clerks. The questionnaire distribution rate did, however, improve during the latter two weeks of the study after the Admitting and Discharge Planning manager was made aware of the distribution difficulties.

The second stage of the sample selection process commenced by matching the completed questionnaires with the

child's ED chart. Those children whose condition had been classified as being nonurgent were to be included in the sample and those classified as being urgent or emergent were to be excluded from the sample.

Before the study began, I met with both the hospital's Chief of Emergency Medicine and Chief of Pediatrics to explain the data collection procedure and to inform them that the IRIS classification system would be used for sample selection. Both of the above physicians agreed to review the IRIS classification criteria and discuss the sample selection procedure with their respective colleagues before the study began. The Chief of Emergency Medicine also agreed to complete the IRIS classification category for any of the ED charts on which the attending physician had failed to do so.

The second stage of the above sample selection process was revised after the first 48 hours of data collection when it became evident that the percentage of ED visits being classified as nonurgent was extremely low. When the 94 questionnaires completed during this period were matched with their respective charts, it was found that only three of the ED visits had been coded as nonurgent. Eighty-nine were coded as urgent, two were not coded (they were later coded by the Chief of Emergency Medicine as urgent), and none were coded as emergent. This situation raised questions regarding the usefulness of the physicians' IRIS

classification for identifying nonurgent pediatric ED users.

Fortunately, during the data collection period, this hospital was taking part in a pilot project to assess the viability and feasibility of the Workload Measurement System (WMS) (Emergency Services Sub-committee, 1992). The WMS is a classification system which has recently been adopted throughout the province of Alberta following the completion of this pilot project. The WMS is designed to replace the more subjective IRIS classification system (emergent, urgent and nonurgent) and to provide the basis of a more equitable allocation of health care funds to EDs.

In the WMS, ED visits are coded by a clerk after patient discharge using a five point scale based upon the discharge diagnosis. The discharge diagnoses used in the WMS are similar to but do not directly reflect the classification categories of the ICD9CM (International Classification of Diseases - Clinical Modification - 3rd edition, 9th revision) (see Appendix F). Using the WMS, a class 1 or 2 visit is considered to be "comparable to a walk-in or office-based physician visit" (Emergency Services Sub-committee, 1992, p.11), thus making it comparable to the previous IRIS nonurgent classification (non-acute or minor conditions not requiring the resources of the ED, and who could be referred to a family physician's office for routine medical treatment or sent home with self-treatment advice).

As the WMS data were readily available to me, a decision was made to audit the charts of all the children for whom a parent completed a questionnaire, and to collect the workload measurement system (WMS) rating in addition to the physician's IRIS classification. The second stage in sample selection was made using the WMS class 1 & 2 category, that is, only the questionnaires and the respective ED charts which were coded by the clerk as being WMS class 1 or 2 were included in the sample.

#### The Data Collection Process

The use of a self-administered questionnaire was chosen for this study because it allowed me to collect data in a controlled, standardized manner around the clock. Having the ED admission clerks hand out the questionnaires encouraged the parents to complete them while in the waiting area (approximately 80% of parents did this). The majority of the parents' responses were therefore not influenced by their interactions with ED nurses or physicians, thereby increasing the validity of the responses.

The parents were instructed via the information sheet that the completed questionnaire was to be sealed inside the brown envelope and deposited in one of the collection boxes. Three fluorescent orange boxes were placed in the ED department for the duration of the study, one on the ED admission clerk's desk and one at each of the front and back

nursing desks (for those who did not have time to complete the questionnaire before being asked to proceed from the waiting area to the treatment area).

When a sample size of approximately 115 WMS class 1 or 2 visits was collected, it was decided to terminate the data collection process. During the data collection period (January 6th to January 25th), a total of 924 children under the age of 16 had been brought to the ED for treatment. In 331 (27.9%) of these visits, the parent who gave permission for the child to be treated received a questionnaire package. A total of 199 (60%) of these questionnaires were completed and returned (196 via the collection boxes and 3 by mail). Nineteen were later discarded: 9 were incomplete, and 10 could not be matched with ED charts because of missing or incorrect identification labels on the recording sheet.

Three completed questionnaires were returned to the hospital by mail without their numbered envelopes. Unfortunately, these questionnaires could not be matched with ED charts because the questionnaires were not numbered. Should this method be used again, it may be beneficial to have the questionnaires numbered and the brown envelopes preaddressed and stamped as a means of increasing the return rate. Approximately 70 of the questionnaires were not accounted for either in the collection boxes or in the ED garbages. These may have been taken home by parents who did



not have time to complete them in the ED and perhaps might have been returned if a preaddressed and stamped envelope had been enclosed.

Although the questionnaires were available in three languages, 177 (98%) of the parents chose to complete them in English. Only three (1.7%) parents completed questionnaires in Chinese, and none in Punjabi. An audit of the surnames of the 331 parents who received copies of the questionnaire revealed that four (1.2%) were Punjabi and 10 (3.0%) were Chinese. Two of the parents with Punjabi surnames, and seven with Chinese surnames chose to complete the questionnaires in English. Although the number of questionnaires received from Punjabi and Chinese parents was small, the ED admission clerks indicated that they did not purposely refrain from giving the questionnaire packages to visible minorities.

When the 180 questionnaires were matched with their respective ED charts, it was found that all but six visits had been classified by the attending physicians using the IRIS classification system. These six were later classified by the Chief of Emergency Medicine as urgent. Of these 180 visits, 10 (5.6%) were emergent, 162 (90.0%) urgent, and eight (4.4%) non-urgent. The emergent group included children with tonsillitis, otitis media and torticollis; the urgent category included children with menstrual cramps, chicken pox and daily dressing changes. It is questionable



whether these conditions are appropriately classified, given the IRIS descriptions of emergent and urgent. Moreover, of the 10 children who presented with upper respiratory tract infection with a temperature less than 39 celsius, one was classified as emergent, seven as urgent and two as non-urgent, yet little difference was found in their ED treatment. One can only speculate as to the reasons for the low number of visits classified as nonurgent as the IRIS classification system in no way affects ED funding. Do attending physicians classify ED visits as urgent or even emergent out of habit? Do they have difficulty judging the urgency of ED visits? or do they justify treating nonurgent conditions in the ED by indicating that they are urgent or emergent?

When the 180 visits were classified using the WMS classification system, 87 (48.3%) were class 1, 27 (15.0%) were class 2, 56 (31.1%) were class 3, three (1.7%) were class 4, and two (1.1%) were class 5. Five visits (2.7%) were not coded because the WMS had no listed score for the discharge diagnosis. Clearly, there is a large discrepancy between the IRIS nonurgent category (4.4% of the sample) and the WMS class 1 and 2 categories (63.3% of the sample), even though theoretically these two classification categories are comparable. This finding calls into question the use of the IRIS classification system (as performed in this hospital) as a means of discriminating between those conditions

requiring the resources of the ED and those conditions not requiring the resources of the ED. Given that the IRIS classification is done by physicians and the WMS by admission clerks using physicians' diagnoses, it may not be the classification criteria per se, but the way they are used that creates the discrepancy between the IRIS and WMS classification systems.

Sixty-six completed questionnaires and their respective chart audits were excluded from the study (WMS class 3, 4, 5, or no code). A survey of the discharge diagnosis recorded on these ED charts revealed that 16 of these children were diagnosed as having gastroenteritis, eight as abdominal pain, seven as upper respiratory tract infections with fever greater than 39 celsius, six as asthma without acute respiratory failure, four as acute bronchitis, four as croup, three as closed fractures of the extremities, two as cellulitis, two as pain in legs, and one each as an allergic reaction with shortness of breath, first time seizure, post-seizure epilepsy, accidental overdose - no complications, human bite, appendicitis, excessive high fever, displaced or dislocated joint, incision and drainage of an abscess, infection of a surgical incision, recheck epithelial tear of right eye, not eating well, yeast infection, and foreign body lodged in the esophagus.

In ten (15.2%) of these 66 cases, the children were admitted to the hospital, and in two (3.0%) cases, they were

seen in the ED by orthopedic specialists. The remaining 54 (81.8%) children were treated and sent home. Of these 54 children, seven received x-rays in the ED, one was given a zimmer splint and crutches, 10 had blood work drawn, nine had urine sent for urinalysis, one had urine sent for culture and sensitivity, and 33 received medications (19 orally, 9 by sidestream, 4 by injection, 1 by suppository, and 1 intravenously). Two of the children had oximetry, one had fluorescein sodium applied topically to the eye, and another had an incision and drainage of an abscess.

A review of the ED treatment and disposition of the 66 children excluded from the sample raises questions as to how well the WMS classification system distinguishes between those who require the resources of the ED and those who do not. Extended-hour walk-in clinics frequently have both the staff and the facilities to provide many of the services that these children received in the ED.

#### Data Analysis

The closed-ended questionnaire questions and the retrospective chart audit data collection form were designed for ease of coding. The nominal, ordinal, interval and ratio data collected via the questionnaire and via the retrospective chart audit were coded (using a code book developed for this study) and then entered into a data file. These data were then analyzed using the SPSSx computer

program. Appropriate measures of central tendency and variation were run. Categories which had less than five responses were collapsed and recoded, and cross tabulation (chi-square) tables were then prepared to identify relationships between family attributes and parental caregiving and care-seeking behaviours. The level of significance for the chi-square was set at 0.05.

The responses collected via the open-ended questionnaire questions were first read to establish a "general sense" of the information collected. Themes were then selected and the parents' responses were placed into these categories. Finally, a descriptive summary of the data collected via the open-ended questions was prepared.

#### Ethical Considerations

The information sheet provided the parents with information about the study including its purpose, the researcher's affiliation, the research subject's part in the study, how questions could be answered, how the data would be used, and how anonymity and confidentiality would be maintained. Only the recording sheet connected the patient's admission number to the questionnaire. This sheet was kept in a locked drawer in the ED admission area during the study. I matched all questionnaires to ED charts. The collected information is being kept in a separate locked location and will be destroyed at the completion of this

study.

The parents were free to decline to participate in the study. They were also informed that their decision to participate or not participate in no way affected their or their family's treatment in the ED that day or in the future. A returned questionnaire was considered consent to participate.

The parents were instructed to keep the information sheet, which included my name and telephone number, for future reference if they so wished. Parents were told (via the information sheet) that if they required further information before completing the questionnaire, they could take the questionnaire home with them and leave their name and telephone number in a sealed envelope in one of the collection boxes. I would then arrange a meeting with them, with an interpreter if necessary, to answer their questions before they completed the questionnaire. None of the parents requested more information.

This study proposal received ethical clearance from the Faculty of Nursing and the Hospital (see Appendix G & H) before the study began.

The results of the data analysis are presented in the next chapter.



## CHAPTER IV - FINDINGS

In this chapter, a description and analysis of the data is presented. The chapter is divided into four main sections. The first section contains the information gathered via the chart audit about the emergency department (ED) visit. The second section provides a summary of the sociodemographic data collected on each of the sample families and also includes who completed the questionnaire, the parents' rating of their children's health status and their children's use of medical services within the past year. The third section contains the information collected about the parents' at-home care-giving behaviours in relation to their children's illnesses or injuries. The final section contains the information collected about the parents' care-seeking behaviours.

### The Emergency Department Visit

#### Day and Time of the ED Visit

Ninety-one (79.8%) of the 114 WMS class 1 & 2 ED visits that make up this sample occurred on weekdays and 23 (20.2%) occurred on weekends. Thirty-five (30.7%) occurred between 0900 hrs. and 1700 hrs., 54 (47.4%) between 1700 hrs. and 2300 hrs., and 25 (21.9%) between 2300 hrs. and 0900 hrs.



Attending Physician

A total of 97 (85.1%) of the 114 children were seen by emergency physicians, 15 (13.2%) by pediatricians, and two (1.8%) by other specialties (one by a general surgeon and one by an ear, nose and throat specialist).

ED Treatment, Disposition and Discharge Diagnosis

While in the ED, 22 (19.3%) of the children in my sample received x-rays (12 of the extremities, 4 chest, 3 cervical, 2 skull, and 1 abdominal flat plate). Thirteen (11.4%) had blood work drawn (11 complete blood counts, 1 sedimentation rate, 1 electrolytes, 5 blood cultures, 1 viral study, 1 prothrombin time, 1 partial thromboplastin time, and one random blood sugar). Six (5.3%) had throat swabs taken, seven (6.1%) had urine sent for urinalysis, and 1 (0.9%) had urine sent for culture and sensitivity. Thirty-four (29.8%) were given medications (16 tylenol, 8 amoxil, 4 auralgan ear drops, 4 gravol, 2 penicillin, 2 ceclor, 1 atarax, 1 erythromycin, 1 bactrim, 1 actifed, 1 tylenol #3, 1 benadryl, 1 tetanus antitoxin, 1 hydrocortisone cream, 1 xylocaine jelly, 1 mycostatin cream, 1 sodium sulamyd ophthalmic ointment, and 1 saline nose drops). Five (4.4%) required suturing, one had fluorescein sodium applied topically to the eye, one received a cervical collar, and one had a fibreglass cast applied.

All of the children were discharged home after being

treated in the ED. The discharge diagnoses recorded in order of frequency were: Otitis Media (13); Scratches and Contusions (12); Sprains and Strains (10); Upper Respiratory Tract Infections - with fever <39 C (10); Minor Lacerations (9); Congestion, Cold, Cough (9); Upper Respiratory Tract Infections - without fever (7); Vomiting and Diarrhea (7); Headache - nonspecific (5); Allergic Reactions (5) (fever due to immunizations, allergic to nuts, conjunctivitis, medication reaction, dermatitis due to immunizations); Prescheduled Appointments (5) (accidental overdose of warfarin the previous day, office follow-up for jaundice-one week old, recheck fractured thumb, recheck fractured finger, recheck cyst -left ear); Cervical Distress (5) (torticollis, neck strain, neck stiffness); Rashes (5) (chicken pox, eczema, ? roseola, ? scarlet fever); Head Injury-no loss of consciousness (2); Dressing Changes (2); Dental Problems - tooth knocked out (1); Gingiviral stomatitis (1); Subconjunctival Hemorrhage (1); Swallowed a nickel (1); Chemical Urethritis-bubble bath (1); Menstrual Cramps (1); Colic (1), and Cast Reapplication (1).

### Sociodemographics

#### Who Completed the Questionnaires

Almost three-quarters of the questionnaires (85, 74.6%) were completed by the child's mother, 22.8% (26) by the father, and 3.6% (3) by both parents.

#### Sociodemographic Characteristics of the Families

As indicated in table 4.1 below, approximately 80% of the parents were married and about half were between 26 and 35 years of age. The average age of the mothers was 33 years; the average age of the fathers was 35 years. One respondent was a single father, and 13 were single mothers. Over 50% of the fathers and over 45% of the mothers had obtained greater than a highschool education. Almost 90% of the fathers and 50% of the mothers were employed full-time. About three quarters of parents had been born in Canada, and over 90% had lived in Canada for more than 10 years. About three quarters reported that they had either one or two children, with most having two children. A total of 70 (61.4%) lived in the community surrounding the hospital. Their annual family incomes ranged from less than \$20,000 to greater than \$80,000. Almost one third of the respondents reported incomes between \$20,000 and \$39,999, with another one quarter reporting incomes between \$40,000 and \$59,999. About 15% had incomes below \$20,000.

**Table 4.1**  
**Sociodemographic Characteristics of the Families**

**Marital Status of the Respondent**

|                    | Number | Percentage |
|--------------------|--------|------------|
| Married            | 92     | 80.7%      |
| Common law         | 9      | 7.9%       |
| Separated/divorced | 8      | 7.0%       |
| Never married      | 5      | 4.4%       |
| Column total       | 114    | 100%       |

**Age of the Parents**

|                       | Mother<br>Number (Percentage) |         | Father<br>Number (Percentage) |         |
|-----------------------|-------------------------------|---------|-------------------------------|---------|
| Less than 25 years    | 15                            | (13.3%) | 7                             | (6.9%)  |
| 26 to 35 years of age | 61                            | (54.0%) | 49                            | (48.5%) |
| 36 to 50 years of age | 37                            | (32.7%) | 45                            | (44.6%) |
| Missing cases         | 1                             |         | 13                            |         |
| Column total          | 114                           | (100%)  | 114                           | (100%)  |

**Education of the Parents**

|                       | Mother<br>Number (Percentage) |         | Father<br>Number (Percentage) |           |
|-----------------------|-------------------------------|---------|-------------------------------|-----------|
| Less than High School | 8                             | (7.1%)  | 5                             | (5.0%)    |
| High School           | 53                            | (46.9%) | 43                            | (42.6%)   |
| College               | 32                            | (28.3%) | 28                            | (27.7%)   |
| University            | 20                            | (17.7%) | 25                            | (24.8%)   |
| Missing cases         | 1                             |         | 13                            |           |
| Column total          | 114                           | (100%)  | 114                           | (100.1%)* |

\* Due to rounding error percent does not equal 100%

**Employment Status of the Parents**

|                     | Mother<br>Number (Percentage) |         | Father<br>Number (Percentage) |         |
|---------------------|-------------------------------|---------|-------------------------------|---------|
| Full-time           | 57                            | (50.4%) | 90                            | (89.1%) |
| Part-time           | 21                            | (18.6%) | 2                             | (2.0%)  |
| Unemployed          | 25                            | (22.1%) | 9                             | (8.9%)  |
| Full-time Homemaker | 10                            | (8.9%)  |                               |         |
| Missing cases       | 1                             |         | 13                            |         |
| Column total        | 114                           | (100%)  | 114                           | (100%)  |

**Length of Time Parents Lived in Canada**

|                       | Mother<br>Number (Percentage) |           | Father<br>Number (Percentage) |         |
|-----------------------|-------------------------------|-----------|-------------------------------|---------|
| Less than 5 years     | 3                             | (2.7%)    | 1                             | (1.0%)  |
| 6 to 10 years         | 5                             | (4.5%)    | 1                             | (1.0%)  |
| Greater than 10 years | 104                           | (92.9%)   | 99                            | (98.0%) |
| Missing cases         | 2                             |           | 13                            |         |
| Column total          | 114                           | (100.1%)* | 114                           | (100%)  |

\*Due to rounding error percent does not equal 100%

**Parent's Place of Birth**

|                                                        | Mother<br>Number (Percentage) |           | Father<br>Number (Percentage) |           |
|--------------------------------------------------------|-------------------------------|-----------|-------------------------------|-----------|
| Canada                                                 | 89                            | (79.5%)   | 74                            | (73.3%)   |
| United States                                          | 3                             | (2.7%)    | 0                             |           |
| Western Europe                                         | 5                             | (4.5%)    | 9                             | (8.9%)    |
| Eastern Europe                                         | 3                             | (2.7%)    | 3                             | (3.0%)    |
| Far East                                               | 3                             | (2.7%)    | 3                             | (3.0%)    |
| India/Pakistan                                         | 1                             | (0.9%)    | 3                             | (3.0%)    |
| Middle East                                            | 0                             |           | 1                             | (1.0%)    |
| South America, Central America,<br>Africa, West Indies | 8                             | (7.1%)    | 8                             | (7.9%)    |
| Missing cases                                          | 2                             |           | 13                            |           |
| Column total                                           | 114                           | (100.1%)* | 114                           | (100.1%)* |

\* Due to rounding error percent does not equal 100%

**Number of Children in the Family**

|              | Number | Percentage |
|--------------|--------|------------|
| One          | 38     | 33.3%      |
| Two          | 56     | 49.1%      |
| Three        | 14     | 12.3%      |
| Four         | 3      | 2.6%       |
| Five         | 2      | 1.8%       |
| Six          | 1      | 0.9%       |
| Column total | 114    | 100%       |

**Location of Family Residence**

|                         | Number | Percentage |
|-------------------------|--------|------------|
| Immediate community     | 70     | 61.4%      |
| Other areas of the city | 21     | 18.4%      |
| Satellite community     | 14     | 12.3%      |
| Elsewhere               | 9      | 7.9%       |
| Column total            | 114    | 100%       |

**Family Income**

|                       | Number | Percentage |
|-----------------------|--------|------------|
| Less than \$20,000    | 16     | 15.2%      |
| \$20,000 to \$39,999  | 33     | 31.4%      |
| \$40,000 to \$59,999  | 27     | 25.7%      |
| \$60,000 to \$80,000  | 20     | 19.0%      |
| Greater than \$80,000 | 9      | 8.6%       |
| Missing cases         | 9      |            |
| Column total          | 114    | 99.9%*     |

\*Due to rounding error percent does not equal 100%



### Child's Overall Health and Past Use of Medical Services

The ages of the children brought to the emergency department ranged from 1 week to 16 years. As seen in Table 4.2 below, about 40% of all the children were under 5 years of age, with almost one quarter one year of age or younger.

**Table 4.2 Ages of the Children Brought to the ED**

| Years of Age | Number | Percentage |
|--------------|--------|------------|
| Less than 1  | 15     | 13.2%      |
| 1            | 12     | 10.5%      |
| 2            | 6      | 5.3%       |
| 3            | 9      | 7.9%       |
| 4            | 5      | 4.4%       |
| 5            | 8      | 7.0%       |
| 6            | 14     | 12.3%      |
| 7            | 8      | 7.0%       |
| 8            | 6      | 5.3%       |
| 9            | 3      | 2.6%       |
| 10           | 4      | 3.5%       |
| 11           | 2      | 1.8%       |
| 12           | 5      | 4.4%       |
| 13           | 3      | 2.6%       |
| 14           | 4      | 3.5%       |
| 15           | 10     | 8.8%       |
| Column total | 114    | 100.1%*    |

\* Due to rounding error percent does not equal 100%

When asked to rate their children's health, 102 (89.5%) of the parents indicated that their child's health was good, 11 (9.6%) rated it as fair, and only one (0.9%) rated it as poor. Eleven (9.6%) of the parents indicated that their children suffered from chronic conditions (6 asthma, 2 ear infections, 1 migraine headaches, 1 eczema and 1 bronchitis).

The children's use of medical services (family physicians, pediatricians, walk-in clinics, and EDs) during the past year and the families' use of the ED during the past year are summarized in Table 4.3 below.

**Table 4.3 Children's Use of Medical Services in the Past Year and Families' Use of the ED in the Past Year**

| Number of Visits | Physician | Walk-in | ED(child)* | ED(family)* |
|------------------|-----------|---------|------------|-------------|
| none             | 12        | 54      | 0          | 0           |
| 1                | 12        | 14      | 81         | 51          |
| 2 or 3           | 47        | 29      | 25         | 32          |
| 4 or 5           | 17        | 9       | 6          | 17          |
| >5               | 26        | 8       | 2          | 14          |
| Total            | 114       | 114     | 114        | 114         |

\*Both of the ED categories included this ED visit in the number of visits made.

Ninety-eight (90.7%) of the children had either a family physician or pediatrician. Most of the parents (90.0%) had taken their children to a family physician or pediatrician within the last year. A sizable majority of the parents (70.0%) had not made use of the ED for their children within the past year and about one half (51) of the families had not used the ED for any other family member during the past year. Just over one half of the children had been taken to walk-in clinics in the past year. Twelve percent of the families had used EDs more than five times in the past year. The ten parents who indicated that they did not have a

family physician or a pediatrician for their child did not appear to differ significantly from the parents who did in terms of sociodemographics or in their use of walk-in clinics or EDs in the past year.

#### Care-giving Behaviour

Included in this section is the information collected about the parents' at-home care-giving behaviours in relation to their children's illnesses or injuries. Specifically, this section provides an analysis of the responses to the questions about the nature of the child's illness or injury, its seriousness, who first noticed it, how it was treated including if and what medications were given, and whether or not the parents used reading material before coming to the ED.

#### Nature of the Child's Illness or Injury

The parents' responses to "What is the nature of your child's illness or injury?" indicated that the children in the study were suffering from a broad range of symptoms (see Table 4.4). Some of the parents indicated that their children were suffering from several different symptoms. The most frequently reported symptoms were fever, arm or leg pain, coughs, nausea, vomiting and diarrhea. Fever was indicated as a symptom by 28% of the parents.

Table 4.4 The Children's Symptoms

|                                  | Number |
|----------------------------------|--------|
| Fever                            | 32     |
| Arm or leg pain                  | 15     |
| Coughs                           | 15     |
| Nausea, vomiting and/or diarrhea | 14     |
| Earaches                         | 11     |
| Sore/stiff neck                  | 10     |
| Falls - head injuries            | 9      |
| Cuts                             | 9      |
| Headaches                        | 9      |
| Sore throat                      | 8      |
| Congestion                       | 8      |
| Stomach ache                     | 6      |
| Red and/or swollen Eye           | 5      |
| Rashes                           | 5      |
| General achiness                 | 2      |
| Listlessness                     | 2      |
| Bruises                          | 2      |
| Swollen glands                   | 2      |
| Bleeding or injured nose         | 2      |
| Wheezing or shortness of breath  | 2      |
| Not eating                       | 1      |
| Itchiness                        | 1      |
| Pain in genitals                 | 1      |
| Knocked-out tooth                | 1      |
| Swallowed a nickel               | 1      |
| Jaundice                         | 1      |
| Column total                     | 174*   |

\*Some children presented with more than one symptom.

The parents of six children had been asked by physicians to return to the emergency department with their children: two for dressing changes, one for blood work (prothrombin time and partial thromboplastin time), one for cast removal, two for rechecks (jaundice in a one week old child, and a cyst on the child's ear). These six children will not be included in the following discussion of at-home

care-giving behaviours.

#### Seriousness of the Child's Illness or Injury

When asked to rate the seriousness of their children's illnesses or injuries, 19 (17.6%) parents rated them as not serious, 29 (26.8%) as serious, seven (6.5%) as very serious, while almost half (53 or 49.1%) were unsure. Included in the not serious category were cuts, falls, broken teeth, asthma, coughing, colds, fever, earaches, sore throats, rashes, nausea, vomiting and diarrhea. Included in the serious category were injuries to the extremities, fever, earaches, sore throats, abdominal pain, stiff necks, headaches, rashes, asthma, achy joints, eye injury, cuts, dog bite, nausea, vomiting and diarrhea. Included in the very serious category were fever, rashes, injuries to the extremities, and nausea, vomiting and diarrhea. The not sure category included falls, injuries to the extremities, cuts, fever, rashes, colic, abdominal pain, ear aches, sore throats, coughing, colds, stiff neck, headache, nausea, vomiting and diarrhea. The above data suggests that there appeared to be no pattern as to what the parents considered to be a not serious, a serious, or a very serious illness or injury. Fever, rashes, nausea, vomiting and diarrhea were found in each of the four categories - not serious, serious, very serious and not sure.

Prior to and during the data collection period, certain areas of Canada were experiencing an increased incidence of viral meningitis. As a result, the symptoms of meningitis were heavily publicized by the media both before and during the first few days of the study. Five (2.8%) of the parents who completed questionnaires indicated that their decision to use the ED had been influenced by their fear of meningitis, as reflected in the following comments:

With the meningitis symptoms so similar I just wanted to be sure [from the father of a two year old diagnosed in the ED as having chickenpox. The parents had spoken to their family physician earlier in the day and received self-care advice about chicken pox, but when the child developed neck and shoulder pain in the late afternoon they decided to bring him to the ED. They arrived at 1700 hrs. and did not telephone their family physician for further advice before arriving].

I didn't want to take any chances with the recent publicity over meningitis [from the mother of a thirteen year old who was diagnosed in the ED as having viremia. The family physician was not telephoned or any other facilities considered. The child arrived at 1600 hours on a weekday].

I'm worried about meningitis...I won't take any risks with the children [from the mother of a twelve year old diagnosed in the ED with an upper respiratory infection. This child arrived at 1600 hrs on a Sunday after the parents had telephoned their family physician who instructed them to go to the ED where the child received tylenol and was sent home with "flu" advice].

I am basically afraid of the meningitis scare [from the mother of a six year old who was diagnosed in the ED as having an upper respiratory tract infection. The parents did not telephone their family physician. They had considered going to a walk-in clinic, but felt that if it was meningitis they would need to go to an ED. The child arrived at 2030 hrs. on a weekday].



[I came to the ED because I am] concerned due to the recent scare of meningitis. I keep hearing these symptoms on the news. If it had been earlier in the day I would have taken my child to our pediatrician [from the mother of a one year old who was diagnosed in the ED as having ? roseola. The child arrived at the ED at 2230 hrs. The parents did not telephone their pediatrician before arriving].

#### Who First Noticed the Child's Illness or Injury

In over 40% of the cases, the mother was the first person to recognize changes in the child's condition (see Table 4.5 below). This finding was, however, associated with the child's age (chi square 54.96, D.F. 4, significance 0.00). Schoolage children (5 yrs. of age and older) tended to recognize changes themselves and then alert the parents.

**Table 4.5 Who First Noticed the Child's Illness or Injury**

|              | Number | Percentage |
|--------------|--------|------------|
| Mother       | 46     | 42.6%      |
| Father       | 9      | 8.3%       |
| Both parents | 10     | 9.3%       |
| Child        | 25     | 23.1%      |
| Other [1]    | 18     | 16.7%      |
| Column total | 108    | 100%       |

[1] other includes: teacher, babysitter, daycare worker, grandparent, friend, or coach

#### Treatment of the Illness or Injury

Thirty-eight (35.2%) of the parents did not report using comfort measures or medications to treat their

children's illnesses or injuries at home. Forty-three (39.8%) reported that they used comfort measures at home (see Table 4.6 below). The most commonly used comfort measure was rest followed by sponging, diet changes, applying ice, using a vaporizer or steaming in the shower, cleaning wounds and applying pressure, applying heat or keeping warm, and taking the child's temperature. Only five parents took their children's temperatures, yet 32 of the children presented with fever. Some parents used more than one comfort measure.

**Table 4.6 Comfort Measures Used at Home**

|                                       | Number |
|---------------------------------------|--------|
| Rest                                  | 19     |
| Sponging                              | 12     |
| Diet Changes                          | 11     |
| Applied Ice                           | 11     |
| Vaporizer or Steaming in Shower       | 9      |
| Cleaned wound and/or Applied Pressure | 7      |
| Applied Heat and/or Kept Warm         | 4      |
| Took Temperature                      | 5      |
| Column total                          | 78*    |

\*Some parents used more than one comfort measure.

Forty-nine (45.4%) parents reported that they gave medications to their children (see Table 4.7 below), with some of the parents giving more than one medication. By far, the most common medication given was tylenol. None of the parents gave their children aspirin, and none of the

parents gave their children medication prescribed for another family member.

**Table 4.7 Medications Given at Home**

|                                              | Number |
|----------------------------------------------|--------|
| Analgesics/antipyretic - tylenol             | 36     |
| Expectorants and Antitussives                | 9      |
| Antihistamines - dimetapp (3), benadryl (2)  | 5      |
| Antimicrobial - Amoxil                       | 3      |
| Emetics - ipecac                             | 1      |
| "Medication prescribed for menstrual cramps" | 1      |
| Column total                                 | 55*    |

\*Some parents gave more than one medication.

Of the 108 parents, 70 (65%) used either comfort measures for their children or gave medications to their children or both before coming to the ED. The child's age and whether or not they had a similar illness or injury in the past significantly predicted whether or not the child received any at-home medications or comfort measures before coming to the ED (chi-square 6.65, D.F. 2, significance 0.036; chi-square 10.72, D.F. 2, significance 0.005 respectively). Infants and preschoolers tended to receive more medications and more comfort measures at home than did school age children, and children who had a similar illness or injury in the past received more medications and comfort measures at home than children who did not have a similar illness or injury in the past. The mother's age, her education, or the family's income did not predict whether or

not the child received at-home medication and/or comfort measures.

Several of the parents took the time to describe in detail how they assessed and treated their child's illness or injury at home:

I tried to feel for any broken bones, I attempted to move his foot and [to see if he could] put weight on it [from the father of an eleven year old who had his right foot x-rayed in the ED and was diagnosed as having a right foot contusion].

I gave benadryl and ipecac for allergic reaction [from the mother of a five year old who had an allergic reaction after eating nuts. This child received no further treatment in the ED].

He fractured his ankle last April and hurt it yesterday again. [The ankle is] swollen and bruised. Since 8 PM last night [I applied] ice and elevation and pain killers [from the mother of a six year old who had his right ankle x-rayed in the ED and was diagnosed as having a sprained right ankle].

[I gave] tylenol for fever, cough medicine, [I] put a vaporizer in her room and gave her cool baths [from the mother of a ten month old who was diagnosed in the ED as having an upper respiratory tract infection who received no further treatment in the ED].

[I gave] tylenol every four hours, ice pack on head, dark quiet room and fluids [from the mother of a nine year old who received five tylenol #3 in the ED to take home and was diagnosed as having a nonspecific headache].

She was given tylenol, the vaporizer was running for the last two days in her room. I gave plenty of fluids and got her to rest [from the mother of a two year old diagnosed in the ED as having otitis media who received auralgan ear drops, an initial dose of amoxil, and a prescription for amoxil].

[I] ran his finger under cold water to stop the bleeding and gave tylenol to relax him [from the mother of a one year old who cut his finger on a tin can and whose laceration was sutured in the ED].

[He has had a] persistent fever of 102, a wet cough [and has been] panting, flushed and fussy and has had loose stool. [I gave him] tepid baths, tylenol, fluids, [put on] cool clothing, [used the] vaporizer and kept him in the house [from the mother of a ten month old who was diagnosed in the ED as having an upper respiratory tract infection and who had a chest x-ray and received an initial dose of amoxil and a prescription].

I put the vaporizer in his room, steamed him in the bathroom, and raised his crib mattress so he could breathe easier [from the mother of a four month old who was diagnosed in the ED as having an upper respiratory tract infection and who received no further treatment].

He bumped the back of his head on ice/cement. We observed him for sleepiness, irritability, lack of appetite, vomiting or slurred speech [from the mother of a three year old who was diagnosed in the ED as having a contusion of the head and who received a skull x-ray and instructions to return to the ED to be rechecked in twenty-four hours or to return if the child vomited more than two times].

I gave tylenol, put him in bed, gave eardrops and put heat on the ear. Then I telephoned the ED and was asked to bring him in to start him on antibiotics [from the mother of a five year old who was diagnosed in the ED as having otitis media and who received auralgan ear drops, an initial dose of amoxil, and a prescription].

He kept throwing up and couldn't keep anything down. I waited awhile to see if he felt better and then tried to give him more food to see if he could keep it down [from the mother of a five month old diagnosed in the ED as having nausea and vomiting and treated with a gravol suppository, given instructions to return if the urinary output decreased and given a gravol suppository for home].



He dropped three cans of food out of the pantry onto his nose. His nose was bleeding in a constant stream from both nostrils. [We] applied even pressure. [The] bleeding persisted for approximately five minutes and the child nearly blacked out [from the mother of a three year old diagnosed as having a nasal contusion who received no further treatment in the ED].

The above comments indicate that these parents attempted to assess the seriousness of their children's illnesses or injuries. They used a variety of care-giving measures, many of which were very appropriate interventions: for example, ice and elevation for a sprained ankle, tylenol and sponging for fever, vaporizers for upper respiratory infections, auralgan ear drops for earaches, and checking sleepiness, irritability and vomiting for a head injury. Some of these children received no further treatment from the ED.

#### Use of Reading Material

Approximately two thirds (67, 62.0%) of the parents had reading material about childhood illnesses and injuries at home; of these parents, approximately one quarter (18, 27.9%) used this material in deciding how to help their children. No significant relationship was found using chi-square between either the parents' use of reading material and the parents' age, education, number of children in the family, the parent's rating of the seriousness of the child's illness or injury, or the child having had a similar illness or injury in the past.



### Care-seeking Behaviour

This section contains the parents' responses to questions about their care-seeking behaviours. Included here is information gathered about the parents' use of lay advice, professional telephone advice, and the decision making process that led up to their children's use of the ED. The data gathered about the six children that were asked to return to the emergency department by physicians is not included in the first five sections of the following discussion of care-seeking behaviours.

### Use of Lay Advice

Before coming to the ED, 33 (30.6%) of the parents had asked individuals outside their household, other than doctors or nurses, for advice about their children's illnesses or injuries (see Table 4.8 below). Relatives were asked most frequently (in almost two-thirds of cases), followed by friends, and then by neighbours, teachers, or coaches.

**Table 4.8 Parent Use of Lay Advice**

|                  | Number | Percentage |
|------------------|--------|------------|
| Relatives        | 21     | 63.6%      |
| Friends          | 8      | 24.2%      |
| Neighbours       | 2      | 6.1%       |
| Teacher or Coach | 2      | 6.1%       |
| Column total     | 33     | 100.0%     |

Twenty-three of the individuals who were asked for advice provided it. Thirteen of these "consultants" told the parents to go to the ED for treatment. The ED discharge diagnosis of these children included: non-specific headache (2), viremia (1), head-injury with no loss of consciousness (1), otitis media (1), torticollis (1), upper respiratory tract infection (1), minor laceration (1), gingival stomatitis (1), swallowed a nickel (1), subconjunctival hemorrhage (1), contact dermatitis - immunized three days previously (1), and contusion (1). Five other "consultants" suggested that the parents try at-home treatments (tylenol, sponging, vaporizers) before getting medical help. Three others suggested telephoning family physicians (when these three parents did this, one was instructed by the family physician to go to the ED, and in the other two cases the family physician was unavailable). One consultant suggested telephoning the ED (when the parent did so they were told to come to the ED), another suggested going to a walk-in clinic. In the latter case, the parent went to a walk-in clinic, was not satisfied with the care provided, and subsequently came to the ED.

A significant relationship was found between the asking of lay advice and the mother's age (chi-square 6.56, D.F. 2, significance 0.034). Younger mothers (those less than 25 years of age) were more likely to seek lay advice than were older mothers (those 25 years of age or older). No

relationship was found between the asking of lay advice and the mother's marital status or education, the father's age or education, the number of children in the family, the income of the family or the nature of the child's symptoms.

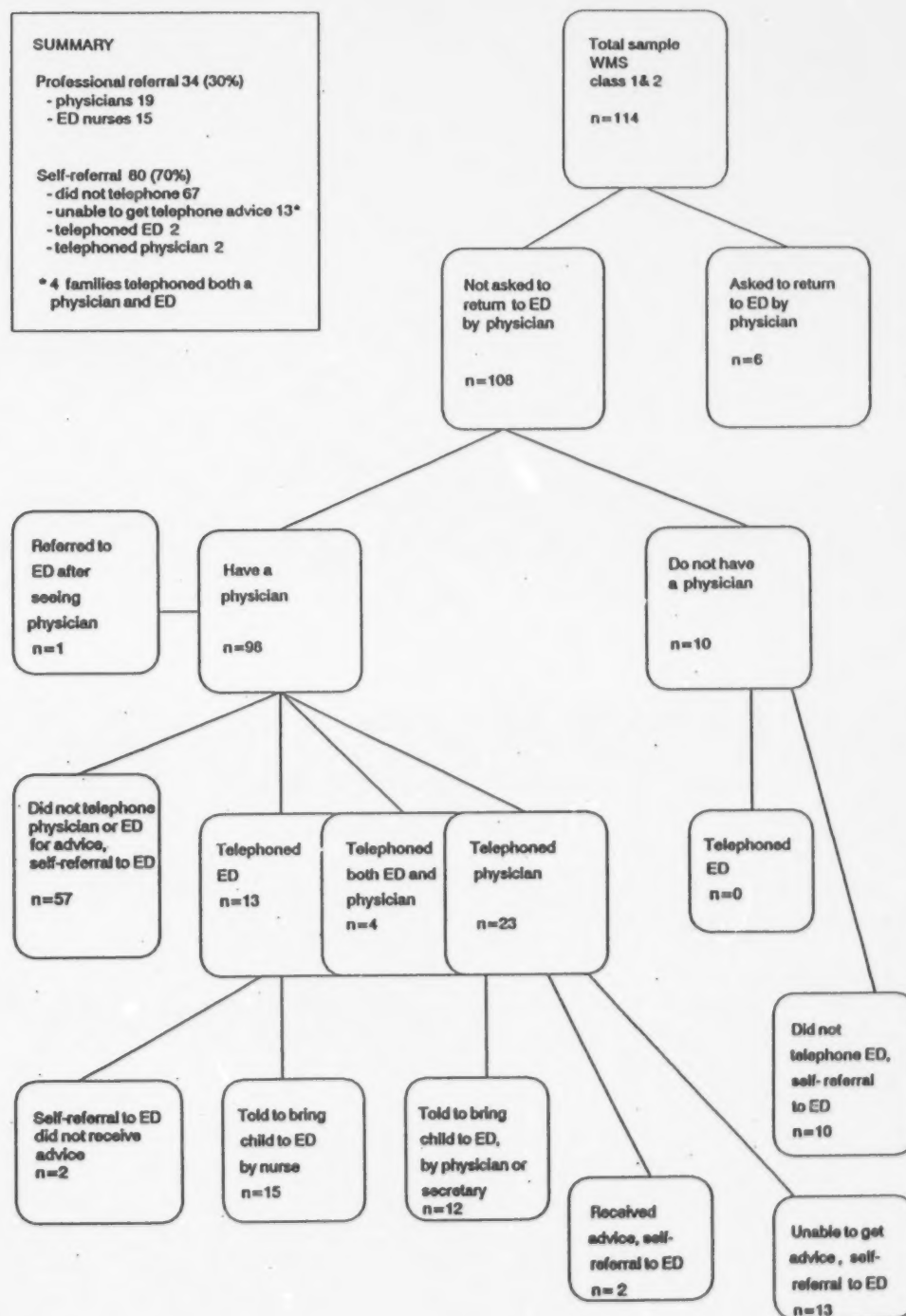
#### Professional Care-seeking

A summary of the parents' professional care-seeking is presented in figure 4.1 below. Seventy percent of the children were self-referred to the ED, and 30% were referred to the ED by professionals. Professional referrals were generated by community physicians, ED physicians and ED nurses.

Twenty-seven (27.6%) of the parents who had a family physician or pediatrician tried to contact her/him for telephone advice before coming to the ED. Of these twenty-seven, thirteen were unable to make telephone contact, and fourteen were able to obtain telephone advice from either their family physician, their pediatrician or her/his secretary.

In twelve of the fourteen cases in which the parents were able to obtain telephone advice, the parents spoke directly to their pediatrician or family physician. Ten of these parents were instructed by family physicians or pediatricians to take their children to the ED. In the

Figure 4.1 Professional Care-seeking



other two cases, they received telephone advice (from their family physicians) for at home treatment and appointments for the next day. Later that same day, in both of these cases, the parents decided to bring their children to the ED. In one of the two remaining cases, the parents were instructed by the pediatrician's secretary to go to the ED, and in the other case, the parents made an appointment with the pediatrician for the next day, but were told by his/her secretary that they could go to the ED that evening because he/she was on call.

In seventeen cases (17.3%), the parents telephoned the ED for advice before arriving. Fifteen of these parents were told by the ED charge nurse to bring their children to the ED if they were at all concerned about their symptoms. One of these parents, who pressed for advice, was told that, "nurses can not diagnose over the telephone". In the two other cases in which the parents telephoned the ED, one parent was "put on hold for 15 minutes" before "hanging up" and bringing the child to the ED, and in the other case, the parent wanted to find out which pediatrician was on call in the ED before coming. In four of the above 17 cases, the parents telephoned the ED after unsuccessfully trying to contact their family physicians or pediatricians for telephone advice.

In summary, 62% (67) of the parents in the sample did not try to obtain professional telephone advice from professionals before bringing their children to the ED. Thirty-seven percent (40) of the parents tried to obtain professional telephone advice from either family physicians, pediatricians or the ED before bringing their children to the ED. In over 50% of the cases in which the parents tried to contact family physicians or pediatricians, the parents were unable to do so. In over 80% of cases in which parents were successful in contacting family physicians or pediatricians, the parents were referred to the ED. In all of the cases in which parents asked for advice from ED charge nurses, the parents were referred to the ED.

#### Decision to Use the ED

The decision to use the ED was made by the child's mother in 68 (63.0%) cases, by the child's father in 18 (16.7%) cases, and by both parents in 21 (19.4%) cases. In the remaining case, the decision to use the ED was made by a physician. This child was sent to the ED from a family physician's office with flu symptoms and a headache, and had blood drawn in the ED for a complete blood count, blood culture, and viral studies before being sent home. No significant relationship was found (using chi-square) between who decided to bring the child to the ED and the parent's age, education, employment status or family income.



#### Time Between Awareness of Symptoms and Arrival at the ED

Almost one half of the children (50, 46.3%) arrived at the ED less than 4 hours after their parents became aware of their symptoms. Thirty-seven (34.3%) arrived between 4 and 24 hours after their parents became aware of their symptoms, and 21 (19.4%) arrived over 24 hours after their parents became aware of their symptoms. No significant relationship was found using chi-square between the parent's use of reading material, or the child having had a similar illness or injury in the past, and the length of time spent at home after becoming aware of the child's symptoms.

#### Previous Use of Other Medical Facilities

In 14 (13.0%) of the cases, the children had been taken somewhere else for their illness or injury before coming to the ED, and in the majority of cases (9) these visits had been made within the previous 24 hours (eight to walk-in clinics, one of these twice in the past week, and one to a family physician). In the other five cases, four children had been to physician's offices within the last week and one had gone to both a family physician's office and a walk-in clinic within the last week.

The parents who had previously taken their children elsewhere gave a variety of reasons for also choosing to use the ED:

There may be something wrong [with my child] that the walk-in clinic physician missed [from a parent whose child was seen at a walk-in clinic only a few hours before arriving at the ED and later diagnosed with an upper respiratory tract infection].

[I came to the ED because I] wasn't satisfied with the walk-in clinic physician's decision [from a mother whose child was diagnosed in the ED with an upper respiratory tract infection].

It was late in the day and my child didn't seem to be getting any better after seeing the walk-in clinic doctor. I wanted her to be checked by a pediatrician [from a mother whose child was seen by a pediatrician in the ED and diagnosed as ? scarlet fever].

I came to the ED because the walk-in clinic did not have a fiberglass cast [from a mother whose twelve year old son had a plaster cast applied at a walk-in clinic five days before for a fractured metacarpal of the right hand and had damaged his cast. The mother had asked her sister-in-law who was an x-ray technician for advice. The sister-in-law suggested that she go to the ED to get a fiberglass cast].

[I came to the ED because I wanted my child to have] a repeat mono-spot taken (blood test to detect mononucleosis) [from a mother who had taken her sixteen year old son to a walk-in clinic twice in the previous five days. A mono-spot had been drawn at the walk-in clinic, but the mother felt that the laboratory took too long to get the results back (3 days) and she "didn't trust their findings". This child had a repeat mono-spot drawn in the ED which was negative. He was diagnosed as having an upper respiratory tract infection and sent home with self-care advice].

[I brought my child to the ED because I was] hoping for quality medical service [from a mother who took her six year old daughter to a walk-in clinic in the evening and came to the ED later the same evening. The child was diagnosed in the ED as having otitis media. She had been put on amoxil at the walk-in clinic and the mother had given her one dose of amoxil before coming to the ED. The child was given tylenol at the ED and the mother received self-care advice].

In summary, the above comments indicate that several of the parents who had previously visited walk-in clinics felt that they had received "poor" quality medical care at these clinics and/or wanted second opinions from the ED.

#### Consideration of Other Medical Facilities

Forty-nine (43.0%) of the 114 parents in the sample (including those asked to return to the ED by physicians) indicated that they had considered but did not subsequently take their children elsewhere before coming to the ED. Another ED was considered by four (8.2%) of the parents, a walk-in clinic by 27 (55.1%), a physician's office by 21 (42.9%). No significant difference was found between consideration of other facilities and number of children, the child having had the same or a similar illness or injury in the past, or the parent's use of reading material.

#### Why This ED for This Illness or Injury

Seventy-five (65.8%) of the 114 respondents answered either or both of two open-ended questions: one, asking why they chose to come to this ED rather than another facility, and the other asking them to elaborate on their decision to use this ED. Content analysis revealed that six factors seemed to play a part in their decision making: (a) convenience (quicker, closer) (b) past ED use, (c) concern about the seriousness of the child's illness or injury, (d)

physician unavailability (unable to contact physician by telephone, office closed, unable to make an appointment "quickly", being referred to the ED by a physician or by her/his secretary over the telephone), (e) beliefs about the child's need for ED services perceived to be unavailable elsewhere in the community, especially x-ray, and (f) beliefs about the quality of care provided in the ED as compared to that available elsewhere in the community, especially walk-in clinics.

Taking into account that each family may have from one to three comments, the results of the above two open-ended questions showed that 24 (32.0%) of the 75 parents came to the ED because they were concerned about the seriousness of their child's symptoms, 21 (28.0%) because of physician unavailability, 15 (20.0%) for convenience reasons, 15 (20.0%) because they believed that the ED provided better service than other community alternatives, 12 (16.0%) because they thought that their child needed the services provided by an ED, and three (4%) because they had used the ED in the past.

Some of the comments made that reflected these six factors were:

Concern about the seriousness of the child's symptoms

My main concern is the rash which developed today, the fever has been gone for two days [from the mother of a one year old brought to the ED at 2200 hrs. on a weekday after being seen by her pediatrician twice in

the previous week. The mother telephoned the ED for advice and was told to bring the child to the ED where she was diagnosed as having ? roseola and sent home after the parents received advice].

My husband had a tumour when he was younger and had severe headaches. I wanted to be safe not sorry [from the mother of a nine year old who had been complaining of a headache and who was diagnosed in the ED as having a nonspecific headache. He received five tylenol #3 to take home. When this child had the same symptom in the past he had been taken to a walk-in clinic. The parents did not consider using a walk-in clinic as an alternative to the ED this visit].

[I was] concerned about internal injuries. He may have injured his kidney or fractured his hip. [My child was in] considerable pain [from the mother of an eight year old who had a labstix urine done in the ED, (which was negative) and who was diagnosed in the ED as having pulled a muscle while playing hockey].

#### Physician unavailability

I would have rather taken her to her doctor. However he doesn't work nights and I would have to take three hours off work to take her [from the mother of a three year old who was brought to the ED at 2040 hrs. and diagnosed as having a subconjunctival hemorrhage. No professional advice was sought before arrival at the ED, and walk-in clinics were not considered. This family had used the ED six times in the last year].

[My pediatrician's] office was closed for the day. I like bringing my child here because I know she will be getting the best care [that] I know of. Sometimes [my child's] pediatrician is here. I can come here when the office is closed in the evening and on the weekend [from the mother of a seven month old brought to the ED at 1836 hrs. and diagnosed as having otitis media. This mother telephoned the ED to see if her pediatrician was on call before arriving. The child received a prescription for amoxil and was sent home after seeing the pediatrician on call. This child had been brought to the ED three times within the past year].



[My pediatrician's] secretary booked an appointment for tomorrow, but told me that I could come here tonight [from the mother of a ten month old diagnosed in the ED as having an upper respiratory tract infection. The symptoms had been noticed by the mother three days previously and she had been treating the child at home with cough medicine and a vaporizer. The child had the same symptoms in the past and had been taken to the pediatrician's office at that time. The mother received advice for self-care in the ED].

#### Convenience

The hospital is nice and close and has always been good to us, the service and treatment are very good and my family has used this emergency department since it opened [from the parents of a nine month old who fell and bumped her head and was brought to the ED within one hour of the fall. In the past year, these parents, who reside in the area surrounding the ED, had taken their child to a walk-in clinic twice and to the ED four times. The child received a skull x-ray in the ED and was diagnosed as having a head injury with no loss of consciousness].

[The ED is] close and easy to get to [from the parent of a six year old diagnosed in the ED as having an upper respiratory tract infection. These parents resided in the area surrounding the ED and had taken their child to walk-in clinics five times in the past and to an ED twice and chose the ED rather than a walk-in this time because it was closer. The child received a chest x-ray in the ED).

#### Perception that the ED provides better care than community alternatives

With children, we believe utmost care must be taken to ensure that they are receiving proper, qualified professional help in a facility that is complete with modern medical equipment and well trained support staff [from the mother of a 14 year old who was brought to the ED at 1800 hrs. on a weekday, within four hours of hurting his left foot. No at-home treatment was given, no lay or professional advice was sought before arrival and no community alternatives were considered. The child had an x-ray of his left foot and was sent home with self-care advice).



[We came to the ED] to ensure [that our child] is properly diagnosed [from the parents of a seven year old who was given a gravol suppository and diagnosed in the ED with nausea and vomiting. This child received tylenol at home, but no gravol. Reading material was not used and lay advice was not sought. The parents telephoned their family physician but were unable to obtain advice. They considered going to a walk-in clinic but felt that the child would get better care in the ED].

I really don't have much faith in the doctors at some of the walk in clinics. I don't trust them with my kids [from the mother of a four month old who resides over 20 KM from the ED. This child had been taken to her family physician twice and to the ED twice since birth, but never to a walk-in clinic. The child was diagnosed as having an upper respiratory tract infection in the ED and sent home with self-care advice].

Perception that the child needed the services provided by an ED

[The staff at the ED] know what to do and have the equipment. We are fortunate to have this wonderful facility near our home. We paid for it and like to use it. Educating people could cut some unnecessary traffic through this ED [from the father of a twelve year old who was diagnosed in the ED with a bruised sternum. The child was injured playing hockey five days previously. No x-ray or treatment was received in the ED. This father considered a walk-in clinic but chose the ED because he believed his son required an x-ray].

[We came to the ED because] we didn't want to go somewhere else and then be sent here because she needed further attention [from the mother of a 3 year old who was diagnosed in the ED with a contusion of the head. He received a skull x-ray in the ED and was sent home with advice. These parents arrived during the hours that community based x-ray facilities were available].

### Past ED use

We have always brought all our children to this ED [from the father of a thirteen year old who came to the ED to have his cast removed. No other facilities were considered. This family of five had used the ED nine times in the previous year and their family physician twice].

### Past Use of Medical Facilities for the Same or a Similar Illness or Injury

Of the 114 children in the sample, 39 (34.2%) had the same or a similar illness or injury episode in the past. When asked where these children had been taken for medical care at that time, 17 (43.6%) of the parents indicated that they had previously used an ED, 15 (38.5%) a walk-in clinic and 17 (43.6%) a pediatrician's or a family physician's office. In short, less than one half of the parents who brought their children to the ED for this illness or injury episode used the ED in the past for a similar illness or injury episode.

In the following chapter, I will discuss the findings of this study in light of previous research in the area of ED use.

## CHAPTER V - DISCUSSION AND CONCLUSION

This chapter is organized into three main sections. In the first section, a summary of the significant findings of this study in view of the two research questions addressed in the study will be presented. These findings will be discussed in relation to other studies of nonurgent ED use and within the broader context of help-seeking for medical care. In the second section, the limitations of the study will be discussed and recommendations provided for further research. The chapter concludes with implications of the study findings for the planning, delivering and funding of health care.

### Attributes of the Study Families

Previous researchers have tended to divide nonurgent ED users into two groups: those without family physicians for whom the ED functions as a family physician, and those for whom the ED functions as a physician substitute (Alpert, Kosa, Haggerty, Robertson & Heagarty, 1969; Weinerman, Ratner, Robbins & Lavenhar, 1966; Wingert, Friedman & Larson, 1968a, 1968b). Those for whom the ED functions as a family physician have been characterized as being members of minority groups, of low socioeconomic status, frequently single parents, having medicaid coverage, living close to the hospital, having no stable relationship with a family

physician and making frequent use of the ED on a self-referral basis. Those for whom the ED functions as a physician substitute have been characterized as predominantly white, of higher socioeconomic status, having health insurance and a stable relationship with a family physician.

In this study, 40% of the families resided outside of the community in which the ED is situated. Eighty percent of parents were married and ranged in age from 19 to 50 years. Most of the parents were educated beyond high school, and almost 90% of the fathers and 50% of the mothers were employed full-time. Over 90% of the parents had been born in Canada or had lived in Canada for more than 10 years. Their annual family incomes ranged from less than \$20,000 to greater than \$80,000. Over one half of the families reported that they had annual family incomes between \$20,000 and \$59,999, with only 15% reporting incomes below \$20,000.

Over 30% of the families were one child families and almost 50% were two children families. Over 40% of the children brought to the ED were under the age of five years. All of the families had health insurance, and all but ten (8.7%) of the families had family physicians or pediatricians for their children. This is consistent with previous Canadian research which found that 90% of ED users had family physicians (Bain & Johnson, 1971; Telglas, 1969;

Vayda, Gent & Paisley, 1975). Most of the parents in my sample made infrequent use of the ED. For 70% of the children, this ED visit was the only ED visit made in the past year. The families appeared to rely on community based physicians to meet their children's everyday health care needs. More specifically, 80% of the children had seen their family physician or a pediatrician at least twice in the past year. In short, this study suggests that this ED functioned predominantly as a physician substitute for a broad cross-section of the families living both in the immediate area surrounding the ED and adjacent communities. The attributes of these study families more closely resemble the characteristics (as identified by previous studies) of families who use the ED as a physician substitute rather than characteristics of families using the ED as a family physician.

Previous research has shown that minorities tend to overuse EDs for nonurgent care, possibly as a means of avoiding the racist abuse and social distance experienced in the offices of nonminority physicians (Yarboro, 1990). The community surrounding the ED in which this study was conducted contains several ethnic minorities. Punjabis, in particular, account for approximately 15% of the population (Statistics Canada, 1986 census, personal communication February 25, 1993), yet only 1% of the children whose parents received questionnaires from the ED admission clerks



were identified as having Punjabi names.

Given that the ED admission clerks did not intentionally refrain from giving questionnaires to visible minorities, several unanswered questions remain: do these visible minorities use EDs located in other areas of the city? Do they use community alternatives to the ED? Do they use lay advice differently than non-minorities? Or are they more likely to treat minor illnesses and injuries at home without the aid of professional advice or treatment?

#### Care-giving and Care-seeking Behaviours

According to Suchman (1965), help-seeking behaviours for medical care fall naturally into five sequential stages: (a) the symptom experience stage, (b) the assumption of the sick role stage, (c) the medical care contact stage, (d) the dependent-patient's role stage, and (e) the recovery or rehabilitation stage. Each stage represents a major transition point involving new decisions about the future course of medical care. The at-home care-giving and care-seeking behaviours explored in this study are representative of Suchman's first three stages.

#### The Symptom Experience Stage

The symptom experience stage or "deciding that something is wrong" is basic to the initiation of the medical care process. It contains three aspects - physical,

cognitive, and emotional - and may include attempts to treat symptoms through self-medication or "home" remedies.

The physical aspect includes the pain, discomfort, change of appearance, or disability actually felt by the individual. The parents in my sample brought their children to the ED for a wide variety of symptoms (fever, nausea, vomiting, diarrhea, achiness, coughing colds, earaches, sore throats, headaches, abdominal pain, rashes, colic, weakness, stiff necks, injuries to the extremities, falls, cuts, eye injuries, broken teeth, and human and dog bites). Two thirds of the parents reported that their children were suffering from either fever, arm or leg pain, coughing, nausea, vomiting, and/or diarrhea. Twenty-eight percent of the parents indicated that fever was one of the symptoms for which they brought their children to the ED. In younger children, these symptoms tended to be noticed first by their mothers, while in older children, these symptoms were first noticed by the children themselves.

The cognitive aspect of the symptom experience stage refers to the interpretation and derived meaning for the individual experiencing the symptoms. About one half of the parents in my sample were unsure of the seriousness of their children's symptoms. One third of the sample believed the symptoms were serious or very serious, and less than one fifth believed they were not serious. There appeared to be no pattern as to what the parents considered to be a "not

serious", "serious", or "very serious" symptom. Five symptoms (fever, rashes, nausea, vomiting and diarrhea) were included in all four categories of seriousness. These findings support previous research which found that parents tend to overestimate the seriousness of their children's symptoms, especially when they arise quickly and/or if fever is present (Bauchner, McCarthy, Sznajderman, Baron, Fink, Forsyth, Lustman-Findling & Cicchetti, 1987).

Although two thirds of the parents in this sample had reading material about childhood illnesses and injuries at home, less than a third used this reading material to "interpret" and/or treat their children's symptoms. Parental use of reading material was not related to level of education. Efforts to alter the cognitive aspect of the symptom experience was the subject of a very large experiment conducted in the United States. Over 1,300,000 copies of a book, Take Care of Yourself, were distributed to American Blue Cross/Blue Shield subscribers. Through the use of algorithms, this publication provided information on the self-diagnosis, home treatment, and appropriate use of health care services for 63 common health problems. The distributors found that the book increased the use of health care services for some families (those who "underused" health care services) and decreased it for others (those who "overused" health care services) (Berg & LoGerfo, 1979; Fries & Vickery, 1979; Moore, LoGerfo & Inui, 1980; Roberts,

Imrey, Turner, Hosakawa & Alster, 1983). The greatest reductions in health care use were achieved when distribution of the book was supplemented with a personal education component and 24 hour telephone access to an individual (not necessarily a physician) who could individualize and reinforce the book's instructions when symptoms were noticed. In short, relying on printed material alone may not be sufficient in altering nonurgent pediatric ED use. Available personal support and reinforcement for parents are required to individualize each illness or injury episode in children.

Two thirds of the parents in my study treated their children at home with comfort measures and/or medications. Rest was the most frequently used comfort measure and tylenol the most frequently given medication. The information provided by those parents who described in detail how they assessed and treated their children's illnesses or injuries at home suggests that these parents treated their children's illnesses or injuries appropriately. Children who had similar symptoms in the past tended to receive more comfort measures and medications than children who had not had similar symptoms in the past, which suggests that parents develop and expand their at-home care-giving treatment repertoires as a result of direct experience in coping with their children's symptoms. Younger children (less than 5 years of age) also tended to

receive more comfort measures and medications than did older children. This could be due to the fact that a larger proportion of younger children presented to the ED with illness symptoms (fever, coughing, nausea, vomiting or diarrhea) than with injury symptoms. Illness symptoms may be more amenable to at-home treatment.

The emotional aspect of the symptom experience stage involves the fear and anxiety that accompanies both the physical and cognitive aspects. When children are ill or injured, parents have been shown to experience higher levels of anxiety than they would if an adult family member or they themselves were ill or injured (Bass & Cohen, 1982; Campbell, 1975; Schmitt, 1980; Tessler & Mechanic, 1978). As a result, parents tend to use health care services for their children on an immediate basis for reassurance as well as treatment. It has been estimated that parental reassurance visits can account for one out of every three health care visits involving children (Bauchner, et al., 1987). Parental reassurance needs could perhaps help to explain the behaviour of the parents in my study who appropriately treated their children at home, yet brought them to the ED. Those who took their children to walk-in clinics for treatment and subsequently brought them to the ED for "second opinions" may also have been seeking reassurance.

Turk, Litt, Salovey & Walker (1985) have suggested that



the precipitate nature of parental demand for pediatric health care may be due to five parental fears: (a) a family history of serious or life-threatening illness, (b) fear of loss or separation, (c) fear of the child's death, (d) the fear of another family member who is pressing for answers about the child's symptoms, and (e) fear of loss of vital function related to the part of the body affected. Several of the comments that were made by the parents reflect these parental fears. In 80% of cases parents brought their children to the ED less than 24 hours after becoming aware of their children's symptoms. They arrived at all times of the day and on all days of the week.

In summary, the parents in my sample used the ED to obtain medical diagnosis and treatment for a wide range of symptoms. In the majority of cases they were either unsure of, or overestimated, the seriousness of these symptoms. Two thirds of the parents were willing to try comfort measures or medications at home, but most were not willing to treat their children at home for extended periods of time. They tended not to rely on printed material as a major source of information. Having had past experience with the same or a similar illness or injury in their children did not necessarily improve parents' abilities to judge the seriousness of their children's illnesses or injuries or to treat them for longer periods of time at home before coming to the ED. It seems that for the parents in

my sample, physical, cognitive, and emotional aspects of the symptom experience each contributed to the parent's decision to bring his/her child to the ED.

#### The Assumption of the Sick Role Stage

Suchman's sick role stage begins when the potential patient seeks symptom alleviation, information and advice from her/his lay referral system. Suchman (1965) found that 74% of individuals made use of lay referral systems before seeking advice from physicians. In 84% of cases, the consultant was a relative, and in 50% of these consultations, the consultant recommended that the ill or injured individual seek medical advice. According to Suchman, most individuals who made use of lay referral systems followed the consultant's advice.

Approximately one third of the parents in my sample sought lay advice before bringing their children to the ED. Younger mothers were more likely than older mothers to seek lay advice. Relatives were consulted in 63% of cases, almost twice as often as friends, neighbours and teachers combined. Almost 80% of the consultants suggested that the parents contact physicians to obtain advice and/or treatment. Fourteen consultants suggested going to the ED, three suggested physician visits, and one suggested a walk-in clinic. Only five consultants (22%) provided the parents with specific treatment suggestions.

The differences in the use of lay advice found in my study as compared to Suchman's may be related to the nature of the sample. Suchman's sample was comprised of adults. The precipitate nature of childhood illness or injury and/or the anxiety experienced by parents when a child becomes ill or injured may help to explain why the parents in my sample sought lay advice less frequently than did those in Suchman's sample. Moreover, Suchman's sample was not confined to populations using EDs. The extent, availability and closeness of the parents' social networks would also be a factor to consider in the seeking of lay advice. Finally, the lower rate of seeking lay advice prior to obtaining professional advice found in my sample may be due to increased public acceptance of physicians as the appropriate providers of pediatric advice and treatment. Suchman's study, published in 1965, was conducted in the United States in a different context of available health care services (e.g., the absence of universal health care insurance).

In summary, my study showed that parents did not make extensive use of lay advice before bringing their children to the ED, and that when parents did seek lay advice those who provided them with advice tended to refer them to physicians.

#### The Medical Care Contact Stage

According to Suchman (1965), the medical care contact stage begins when an individual who believes herself/himself

to be ill or injured seeks professional medical advice. For the majority of children in my sample, the medical care contact stage began when they arrived at the ED. Seventy percent (80) of the children were classified as ED self-referrals, meaning that the parents brought their children to the ED without being referred to the ED by family physicians, pediatricians or the ED. This finding is consistent with Hilker's (1978) study in which 66% of the children were ED self-referrals.

The remaining 30% (34) of the children in my sample were classified as professional ED referrals, meaning that these children were referred to the ED by professionals. Thirteen parents were referred to the ED by community physicians or their office staff, six by physicians affiliated with the hospital, and 15 by ED nurses. For these parents the medical care contact stage began before they brought their children to the ED.

Professional telephone advice. Twenty percent of the 108 parents (those parents who were not asked to return to the ED for rechecks) telephoned physicians for advice before bringing their children to the ED. This finding contrasts with previous studies of nonurgent pediatric ED use. In the USA, Hilker (1978) found that 38% of parents who had family physicians for their children tried to contact them before coming to the ED. Wabschall (1983) reported that 51% of parents tried to contact physicians before coming to the ED.

Similar findings were reported in Canada, in studies conducted both before and after the introduction of universal medical care insurance. Read (1966), for example, found that 50% of parents tried to contact their physicians before coming to the ED, and Robinson, Kinnis, Anderson, Argue & Miller (1969), in a British Columbia sample, reported that 56% of parents attempted to contact their physicians before bringing their children to the ED.

The low rate of attempted physician contact found in my study could be due to changes in the Canadian public's acceptability of self-referral ED use. Both of the Canadian studies reported are over twenty years old. The low rate of physician contact could also be due to the way in which physicians in the community surrounding the ED use the ED. They may be using the ED as an after-hours office substitute instead of providing their patients with at-home care-giving telephone advice, or seeing patients in their offices on an immediate basis. That over 80% of parents in my sample, who telephoned their physicians for advice, were referred to the ED adds further support to the suggestion that physicians in this community may be using the ED as an after-hours office substitute.

Using the ED as an after-hours office substitute is of concern for two reasons. First, it has been shown that community physicians can decrease nonurgent ED use when they are consistently contacted by their patients before they use



the ED (Bergman & Haggerty, 1962; Bonham & Barber, 1987; Fleming & Andersen, 1986; Hochheiser, Woodward & Charney, 1971; Hurley, Freund & Taylor, 1989; Moore, Bernstein & Bonnano, 1972). Hochheiser, Woodward and Charney (1971) found that this use could be decreased by as much as 79%. This level of reduction, however, can only be achieved when the physicians in the community are committed to providing 24-hour telephone accessibility and personalized, continuous, comprehensive care. In my sample, over one half of the parents who tried to contact their physicians by telephone before coming to the ED were unable to do so.

The second reason why using the ED as an after-hours office substitute is of concern is that past family patterns of obtaining medical care may influence future patterns of obtaining medical care. According to Bass and Cohen (1982), when an ED provides prompt satisfactory care to its users regardless of the nature of their illnesses or injuries, it acts to legitimize and encourage continued use. This may help to explain both the low rate of attempted physician contact before using the ED and the high rate of ED use found in a minority of the families during the previous year. Eight children had been brought to the ED four or more times, and 31 (27%) of the families had used the ED four or more times for family members. When physician telephone contact results in ED referral on a continuing basis, parents may soon learn to cut out the "middle man"

and instead go directly to the ED where they have in the past received treatment regardless of the nature of their children's illnesses or injuries.

Nonurgent ED use was further encouraged by those physicians who had asked six children in the sample to return to the ED for "rechecks". This practice not only encourages future nonurgent ED use, but also does a disservice to the patient's community physician to whom belongs the responsibility of providing continuous, comprehensive care.

While most parents in the sample who contacted their physician were referred directly to the ED, in two cases physicians provided at-home care-giving advice and scheduled office appointments for the next day. In both of these situations, parents brought their children to the ED later the same day. The "in spite of receiving advice" ED use, demonstrated by these two families, has been explored by Smith and McNamara (1988). They found that parents who used the ED after receiving telephone advice from their physicians did so because they were dissatisfied with the parent/physician communication. These parents felt that they had not received sufficient advice over the telephone and felt uncomfortable in continuing to manage their children's illnesses or injuries at home until they were able to schedule an office visit. Smith and McNamara recommend that in all "sick call" telephone conversations,

the physician should ascertain whether the parents are satisfied with the telephone advice and whether they feel that they can cope at home until the scheduled appointment. These authors suggest that if the parents are not satisfied or feel that they cannot cope, then in order to avoid a subsequent ED visit, the parent's need to see the physician immediately should be accommodated. This underscores the fact that for nonurgent ED use to be decreased, community physicians must make themselves accessible to parents and be sensitive to their need for continuing support.

The parents in my sample attempted to obtain telephone advice not only from family physicians or pediatricians but also from the ED itself. Seventeen (15%) of the parents telephoned the ED before bringing their children to the ED. Four of these 17 parents telephoned the ED after they failed to contact their family physician or pediatrician by telephone. All of the parents who asked for advice from the ED charge nurse were told to bring their children to the ED. This indicates that ED nurses are not fulfilling what some parents believe to be one of the nurses' roles. One mother of a six year old who was seen by a pediatrician in the ED and later diagnosed as having influenza put it this way:

I realize that the ED is a very busy place. I feel foolish bringing my child here when it is just the flu. If only I could get general symptoms of common illnesses over the telephone I would not be so quick to bring him in.

Previous use of other medical facilities. Suchman (1965) indicates that the length of the medical care contact stage can be prolonged if physician contact fails to provide an "acceptable" diagnosis or treatment. When an "acceptable" diagnosis or treatment is not provided, the individual usually goes on to visit other physicians. Thirteen percent of the children in my sample were taken elsewhere for medical care before being brought to the ED. In the majority of cases these children were taken to walk-in clinics within the previous 24 hours. A recent Alberta study cited in a Government of Alberta report found that 21% of ED users had seen another physician for the same medical problem within 72 hours of their ED visit (Government of Alberta, 1989). The difference between these findings may be attributed to the different samples. The Government of Alberta study used total ED populations whereas the present study was restricted to children who used the ED for "nonurgent" care.

"Double doctoring" is of concern not only because it contributes to increased health care costs, but also because it reflects a lack of trust in the patient/physician relationship (Chrisman & Kleinman, 1983). Balint (1964) maintains that it is important for physicians to go beyond the patient's presenting symptoms to explore the "second diagnosis", namely, why the patient has chosen to seek

advice and treatment for "these" symptoms at "this" time. This is difficult to do without the development of a trusting patient/physician relationship. Exploring the "second diagnosis" may be particularly important with parents, who often experience increased anxiety and may require frequent reassurance. The quick impersonal nature of the care provided in walk-in clinics and EDs is not conducive to this exploration. A relevant question to be addressed, then, is, how soon and how frequently do parents take their children to "regular" physicians subsequent to using the ED or a walk-in clinic when their "regular" physicians were unavailable?

Consideration of other medical facilities. Forty-three percent of the parents in my sample indicated that they had considered taking their children elsewhere for medical advice before bringing them to the ED. Of this number, over one half had considered walk-in clinics, while slightly fewer had considered physicians' offices. Conspicuous by its absence is the finding that none of the parents had considered taking their children to a public health centre. This is of concern because, as parents of infants, many of the respondents would have had recent experiences with public health nurses. Two children, in particular, presumably had very recent contact with public health nurses, as the children presented to the ED with immunization reactions. This finding raises questions about



the public's perception of the role of public health nurses.

Why this ED for this illness or injury. Scherzer, Druckman and Alpert (1980) have suggested that parents select a physician or a medical facility based upon their perception of the nature and/or severity of their children's symptoms and the ability and appropriateness of the physician or medical facility to treat these symptoms. When parents believe that their children's symptoms represent a health emergency, they tend to adopt a "discontinuity of care" pattern of medical use. In other words, they make use of physicians or medical facilities they would not normally use.

The parents in this study cited several reasons for choosing to bring their children to the ED rather than taking them elsewhere for medical advice. The most frequently mentioned reason for not going elsewhere was their concern about the seriousness of the symptoms, followed by physician unavailability, convenience, belief that the ED provided better services than community alternatives, belief that their children required the services of the ED, and past ED use.

Despite methodological differences between previous nonurgent pediatric ED studies (Hilker, 1978; Smith & McNamara, 1988; Wabschall, 1983) and this study (they used lists of preselected reasons which the parents selected or rated as being most influential in their decision to bring

their children to the ED, whereas I used open-ended questions), some of the reasons that the parents in my study gave for deciding to use the ED were also identified in their studies. The seriousness of the child's symptoms was identified by Hilker (1978) and Smith & McNamara (1988); physician unavailability by Hilker (1978) and Smith & McNamara (1988); belief that the ED provided better services by Hilker (1978) and Wabschall (1983); belief that their children required the services of the ED by Hilker (1978) and Wabschall (1983); and past ED use by Hilker (1978).

Two of the comments made by parents in my study may provide some insight into the importance of convenience relative to both parental belief that the ED provides better or more appropriate services than community alternatives and parental concern about the seriousness of the symptoms. A father who drove 80 Km. to the ED and whose child was sent home for self-care after being diagnosed in the ED as having a viral illness said that he decided to come because "our small town has limited facilities for treating children". A mother whose child was sent home with advice for self-care after being diagnosed in the ED as having an upper respiratory tract infection commented, "I travelled only two minutes to get here, but I would have gone for as long as it took to make sure this wasn't pneumonia, which is what we suspected". It appears that for these parents convenience was not as important as their belief that the ED provided

better or more appropriate services than community alternatives, or as important as their concern about the seriousness of the symptoms.

To summarize the medical care contact stage, 30% of the children in my sample were referred to the ED by professionals, and 70% were self-referred. Professional referrals were generated by community physicians or their secretaries when these physicians were unable or chose not to provide parents with telephone advice and/or see them in their offices on an immediate basis; by ED and community physicians who instructed parents to return to the ED for rechecks; and by ED nurses who instructed parents to bring their children to the ED. The majority of individuals who came directly to the ED (self-referrals) did not consider taking their children to community alternatives, nor did they try to contact physicians by telephone for advice before coming to the ED. Concern about the seriousness of their children's symptoms most strongly affected parents' decisions to use the ED on a self-referral basis followed by physician unavailability, convenience, belief that ED provided better services than community alternatives, and belief that their children required the resources of the ED. Past ED use appeared to play a less significant role in decision making.

Limitations of the Study and Recommendations  
for Further Research

It is known that different EDs serve different populations in different ways. The role that an ED assumes is dependent upon the perceived needs of the community within which it is located and the perceived accessibility and acceptability of physicians within that community (Torrens & Yedvab, 1970). One of the limitations of this study is that it was completed at one hospital ED. These results can therefore only be generalized to EDs serving similar populations in communities with similar patterns of medical practice.

The generalizability of the results is further constrained by the use of a convenience sample and the sample selection process. As a result of the difficulties encountered in obtaining the sample (discussed in chapter III), only 35% of the parents who brought children to the ED during the data collection period received questionnaires. It is not known how many "nonurgent" subjects did not receive questionnaires and if these subjects differed significantly from those who did receive questionnaires. Therefore the final sample may not be representative of all "nonurgent" pediatric ED users at this particular hospital during the data collection period.

A third limitation to generalizability relates to the time period in which the data was collected. The study was

conducted over a three week period in January, 1992. Prior to and during the first few days of the study this area of Alberta experienced an increased incidence of viral meningitis. As a result, the symptoms of meningitis were heavily publicized by the local media. ED use during the data collection period may have been affected by a higher than usual need for parental reassurance. Despite these limitations, the credibility of the results is strengthened by the fact that previous research of nonurgent pediatric ED use reported similar results, particularly in the areas of sociodemographics and reasons for using the ED.

Two main recommendations for further research arise from the results of this study. First, given the underrepresentation of ethnic minorities in the sample, it would be useful to investigate the role that ethnicity plays in parental care-giving and care-seeking behaviour for conditions not requiring the resources of the ED. In his study of Irish Catholic, Italian Catholic and Anglo-Saxon adults, Zola (1966) found that ethnicity influenced how individuals defined and responded to symptoms. Ethnicity may also affect how parents define and respond to their children's symptoms, how they care for their children's illnesses at home, and how they seek out medical care.

Second, it would be beneficial to explore the care-giving and care-seeking behaviours of those parents who do not take their children to the ED for the treatment of



illnesses or injuries not requiring the resources of the ED. Deciding to seek medical care is one of four possible responses that an individual can make when she/he experiences physical symptoms, the other three being taking no action, self-treatment, or lay consultation. Seeking medical care occurs in only 25-35% of all symptom experiences (McKinlay, 1973). Moreover, the ED is only one of the facilities from which the public can seek medical care. Exploring the care-giving and care-seeking behaviours of those parents who do not take their children to the ED for nonurgent care could provide valuable insights into factors which facilitate the use of alternate care-seeking or at-home care-giving behaviours. This information may provide a more complete understanding of the behaviours of those parents who do take their children to the ED for nonurgent care.

It may also be useful to explore nonurgent ED use by employing different methodologies. Previous researchers have relied almost exclusively on cross-sectional descriptive survey designs. Ethnographic design studies, such as that used by Linley (1984) in exploring mothers' attitudes regarding health care for their children, or phenomenological or grounded theory designs may provide a more indepth understanding of the experience or process of parental care-giving and care-seeking.

### Implications for the Planning,

### Delivering, and Funding of Health Care

The major implication of this study for those responsible for planning, delivering and funding health care within this community is that nonurgent pediatric ED use is an indirect measure of the perceived availability, accessibility, and acceptability of community based diagnostic and treatment alternatives. It is for this reason that emergency department patient classification systems such as the acuity based IRIS or the diagnostic classification based WMS fail to accurately differentiate between appropriate and inappropriate ED use.

Appropriateness is a measure best determined outside of the ED. Unless accessible, acceptable alternatives to the ED are available to the public on a 24 hour basis, nonurgent pediatric ED use is appropriate. It is only when these alternatives are in place that ED classification systems can be used to determine appropriateness.

The responsibility for ensuring that ED alternatives are accessible and acceptable belongs to those who plan and fund health care. The Canadian health care system is based upon an egalitarian view of distributive justice. Canadians have endorsed this view of justice by adopting universal, publicly funded comprehensive health insurance (Evans, 1986; Mechanic, 1986). Egalitarians believe that all are entitled to share in society's goods irrespective of merit, effort,

societal contribution, or ability to pay (Beauchamp & Childress, 1989). Health care services are one of many goods that we as Canadians are entitled to share.

When health care services are used in an efficient and effective manner we benefit from this social good, but when they are used in an inefficient or ineffective manner we stand to lose potential benefits. Using the ED for nonurgent pediatric care has been shown to be inefficient and ineffective (Bain & Johnson, 1971; Barnett & Rodnick, 1979; Brook & Stevenson, 1970; Brook, Berg & Schechter, 1973; Crippen, 1985; Heagarty, Robertson, Kosa & Alpert, 1970; Kahn, Anderson & Perkoff, 1973; Orr, Charney, Straus & Bloom, 1991; Reilly, 1981; Roth, 1972; Satin & Duhl, 1972). Continuing to accept or encourage nonurgent ED use through the development of "fast-tracks" (which facilitate nonurgent ED patient flow through the ED) or the continued expansion of ED facilities does not address the "problem of nonurgent ED use". These "solutions" merely ensure that EDs remain competitive with walk-in clinics, while also providing employment for more ED physicians than are required to treat "real" emergencies.

Community based nurses and ED nurses could play a vital role in decreasing nonurgent pediatric ED use. It is known that community-based neighbourhood health centres that are staffed by salaried family physicians and appropriate medical specialists and ancillary health personnel, and that

provide x-ray and laboratory facilities during evening and weekend hours, as well as 24 hour on-call coverage, can decrease nonurgent ED use (Chan, Galaif, Kushi, Bernstein, Fagelson & Drozd, 1985; Fleming & Andersen, 1986; Hillman & Charney, 1972; Hocheiser, 1971; Ullman, Block, Boatright & Stratmann, 1978; White, Alpert & Kosa, 1967). Community based nurses working collaboratively with family practitioners and pediatricians in community based clinics could provide parents with direct access to nursing services aimed at health promotion, illness prevention, and basic at-home care-giving advice for common childhood illnesses or injuries. A 24 hour "hot line" staffed by pediatric nurse practitioners could provide parents with basic at-home care-giving and care-seeking advice. Expansion of nursing roles in this manner would, however, require a major shift in health care funding to include government reimbursement for nursing services. This shift is currently being promoted by the Alberta Association of Registered Nurses (1993).

It is also known that ED diversion by specially trained ED nurses can decrease persistent nonurgent ED use when community-based neighbourhood health centres are in place (Hansagi, Allebeck, Edhag, 1989, 1991; Hansagi, Carlsson, Olsson & Edhag, 1987; Straus, Orr & Charney, 1983). ED diversion, or the practice of diverting nonurgent ED patients to community alternatives rather than treating them in the ED, has been successfully employed in the United

States and in Sweden. It has been most effective when carried out by specially trained ED nurses and in combination with self-care advice and making an appointment for the individual at a community-based neighbourhood health centre or a family physician's office. ED physicians were found to be less efficient in diverting patients because they often found it simpler to manage minor medical problems on the "spot". ED nurses who are sensitive to the needs of parents with ill children and who possess advanced assessment and counselling skills could assume an expanded role in diverting "nonurgent" ED users to available community-based neighbourhood health centres.

The implementation of user fees has often been suggested as a way to decrease nonurgent ED use. This study has shown that user fees based on an institutional definition of appropriateness, however, may only penalize parents for their inability to "correctly" identify the seriousness of their children's symptoms, and in some instances for the lack of available, acceptable community alternatives to the ED. In the present climate of fiscal constraint on health care funding it is timely to "rethink" how health care services are accessed and delivered. Challenging old ways is difficult, but we can no longer afford not to.



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## Appendix A - Department of Emergency Medicine Emergency Patient Classification Guidelines

This classification of the emergency patient is based on several factors including: (a) diagnosis, (b) severity of condition, (c) complications, (d) potential for complications, (e) patients' age, (f) patients' general health and underlying medical conditions, (g) medical/nursing intervention required.

The listing is not meant to be all inclusive but merely to provide guidelines for a functional classification system.

### Emergent

Patient that requires immediate medical intervention. A delay in the provision of treatment will threaten the patient's life or functional ability.

- (a) Life threatening if not treated and dealt with immediately.

Examples: subarachnoid hemorrhage, status epilepticus, bacterial meningitis, brain abscess, acute hemorrhage (subdural, epidural, intracerebral), loss of consciousness (cerebral edema, head injury, any of the above), acute epiglottitis, upper airway obstruction (trauma, foreign body, infection, etc.), respiratory failure (severe pneumonia, chest trauma, COPD, ARDS, pulmonary embolism, acute myocardial infarction, pulmonary edema, dissecting aortic aneurysm, shock status (hypovolemia, sepsis, dysrhythmia), dysrhythmias, trauma, cardiac contusions/lacerations, pericarditis with effusion and cardiac tamponade, hypertensive crisis, gastro-intestinal bleeds, acute hepatic failure, perforated viscus, bowel obstruction, fulminant pancreatitis, sepsis, subacute bacterial endocarditis, acute psychotic states, suicidal states, hypoglycemia, diabetic ketoacidosis, hyperosmolar nonketotic coma, eclampsia, ectopic pregnancy.

- (b) Non-life threatening- but a high level of patient morbidity if not dealt with in immediate time period to prevent high degree of morbidity. Various presentations of the conditions in the previous class would fall into this category, for example, severe pneumonia but not in respiratory failure.

Examples: acute angle closure glaucoma, penetrating eye injuries, periorbital cellulitis, acid/alkali burn of severe degree, severe epistaxis, major fractures, compound fracture, major joint dislocations, septic joint,

osteomyelitis, fractures/dislocations with neuro/vascular compromise include compartment syndrome, arrhythmias (PAT, rapid atrial fibrillation, multifocal premature ventricular contractions), acute vascular occlusion, deep venous thrombosis, accelerated hypertension, severe renal colic, renal failure.

### Urgent

Urgency based on patients' presentation/ discomfort, severity of condition, likelihood of complications if condition unattended.

Examples: respiratory disorders of moderate severity requiring prompt assessment and treatment (asthma, COPD, pneumonia, croup, etc.), fractures (colles, ulna, humerus, calcaneus, etc.), cellulitis/abscess, gastroenteritis with dehydration, renal colic, pyelonephritis, ischiorectal abscess, uncontrolled diabetes, depression, significant lacerations, iritis, pelvic inflammatory disease, incomplete abortion, peptic ulcer disease, pancreatitis, diverticulitis, dislocations (interphalangeal joints, patella, radial head), significant burns, pyrexia not yet diagnosed, viral meningitis, streptococcal pharyngitis, electrolyte imbalance, febrile convulsion.

### Nonurgent

Recovery is not dependent on commencement of treatment within 24 hours.

Examples: ligamentous strains, muscle strains, upper respiratory tract infections, conjunctivitis, feeding problems, colic, anxiety states, functional abdominal pain (bowel spasm, constipation), menstrual disorders, costochondritis, abrasions, contusions, minor lacerations, vaginitis, cystitis, dermatologic disorders, migraine/tension headaches, gastroenteritis.

## Appendix B - Questionnaire

CHILDREN  
IN THE  
EMERGENCY DEPARTMENT

ਹਸਪਤਾਲ ਦੇ ਐਮਰਜੈਂਸੀ ਵਿਭਾਗ  
'ਵਿੱਚ ਲਿਆਂਦੇ ਬੱਚੇ'

ਬੱਚੇ ਦੀ  
ਐਮਰਜੈਂਸੀ  
ਵਿਭਾਗ

IF YOU WOULD LIKE TO COMPLETE THIS QUESTIONNAIRE  
IN ENGLISH BEGIN ON PAGE I

ਅਗਰ ਤੁਸੀਂ ਇਹ ਸਵਾਲਨਾਮਾ ਪੰਜਾਬੀ ਵਿੱਚ ਸੁਕੰਮਲ ਕਰਨਾ  
ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਸਫਾ 11 ਤੋਂ ਅਰੰਭ ਕਰੋ।

如果您願意用中文填寫，請從第二十一頁開始。

Part 1

This part of the questionnaire asks about the child you have brought to the emergency department today. If you brought more than one child to be seen, you will have received a questionnaire for each child. Please fill out Part 1 for each child, and Part 2 only once.

Q-1 You are this child's (Circle number)

- 1 MOTHER
- 2 FATHER
- 3 STEP-PARENT
- 4 GUARDIAN
- 5 FOSTER PARENT
- 6 OTHER--SPECIFY \_\_\_\_\_

Q-2 Did you bring your child to this emergency department today because one of the emergency department doctors told you to come back here to be re-examined or have further treatment?  
(Circle number)

- 1 NO
- 2 YES

→ SKIP TO Q-4 ON THIS PAGE

↓  
Q-3 (If you were told to return by an emergency department doctor) On what day and date did your child last visit this emergency department?

\_\_\_\_\_  
NOW SKIP TO Q-26 ON PAGE 6

Q-4 What is the nature of your child's illness or injury? (for example, fever, coughing, pain, rash, cut)

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Q-5 How serious would you say is your child's illness or injury? (Circle number)

- 1 NOT SERIOUS
- 2 MODERATELY SERIOUS
- 3 VERY SERIOUS
- 4 I AM NOT SURE

Q-6 Who first noticed that your child was ill or injured? (Circle number)

- 1 MOTHER
- 2 FATHER
- 3 GRANDMOTHER
- 4 GRANDFATHER
- 5 YOUR CHILD, HIMSELF/HERSELF
- 6 TEACHER
- 7 BABY-SITTER
- 8 OTHER--SPECIFY \_\_\_\_\_

Q-7 When did the above person first notice that your child was ill or injured? (Circle number)

- 1 LESS THAN 4 HOURS AGO
- 2 4 - 24 HOURS AGO
- 3 WITHIN THE LAST 2 TO 3 DAYS
- 4 WITHIN THE LAST 4 TO 7 DAYS
- 5 1 - 2 WEEKS AGO
- 6 3 - 4 WEEKS AGO
- 7 MORE THAN 1 MONTH AGO

Q-8 What type of things did you, or any other members of your household (household means all the people who live with you in your home as family members), do to help your child at home before deciding to come to the emergency department? (for example, was this child given any medicines [if so what were they], special foods, kept in bed, kept in the house, vaporizer, ointments).

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Q-9 Do you have any reading material at home about childhood illnesses or injuries?  
(Circle number)

- 1 NO  
2 YES

SKIP TO Q-11 ON  
THIS PAGE

Q-10 Did you or anyone in your household use this reading material in deciding how to help your child? (Circle number)

- 1 NO  
2 YES

Q-11 Before you came to the emergency department, did you happen to ask any other people outside of your household, other than doctors or nurses, for advice about your child's illness or injury?

- 1 NO  
2 YES

SKIP TO Q-17  
ON THE NEXT PAGE

Q-12 What other people did you ask?  
(Circle number)

- 1 RELATIVES  
2 FRIENDS  
3 NEIGHBOURS  
4 OTHER--SPECIFY \_\_\_\_\_

Q-13 Did they offer you or anyone in your household suggestions for helping your child? (Circle number)

- 1 NO  
2 YES

SKIP TO Q-17 ON THE  
NEXT PAGE

Q-14 What suggestions were offered?

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Q-15 Did they suggest that you take your child to an emergency department? (Circle number)

- 1 NO
- 2 YES

Q-16 Did they suggest any other places you might go to get help for your child?  
(Circle number)

- 1 NO
  - 2 YES--SPECIFY OTHER PLACES
- 

Q-17 Who in your household decided to bring your child to the emergency department to-day?  
(Circle number)

- 1 CHILD'S MOTHER
- 2 CHILD'S FATHER
- 3 CHILD'S STEP-PARENT
- 4 CHILD'S GUARDIAN
- 5 CHILD'S FOSTER PARENT
- 6 OTHER--SPECIFY \_\_\_\_\_

Q-18 Did you happen to telephone this emergency department before you brought your child to-day?  
(Circle number)

- 1 NO
- 2 YES

SKIP TO Q-20  
ON THE NEXT PAGE

Q-19 What were you told to do when you telephoned?

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Q-20 Do you happen to have a family doctor or pediatrician for your child? (Circle number)

- 1 NO  
2 YES

SKIP TO Q-24  
ON THIS PAGE

Q-21 Did you happen to telephone your child's family doctor or pediatrician before coming to the emergency today? (Circle number)

- 1 NO  
2 YES- FAMILY DOCTOR  
3 YES- PEDIATRICIAN

SKIP TO Q-24  
ON THIS PAGE

Q-22 When you telephoned him/her were you able to speak to someone who could give you advice? (Circle number)

- 1 NO  
2 YES

SKIP TO Q-24 ON THIS PAGE

Q-23 Who did you speak to and what did he/she tell you to do?

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Q-24 Since your child developed this illness or injury has he/she been taken anywhere else to get help? (Circle number)

- 1 NO  
2 YES

SKIP TO Q-26 ON  
THE NEXT PAGE

Q-25 Where else did you go and when?

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Q-26 Before coming to the emergency department today, did you consider taking your child to any other places for this illness, injury, or return visit? (Circle number)

- 1 NO  
2 YES

SKIP TO Q-29  
ON THIS PAGE

Q-27 What other places did you consider? (Circle all that apply)

- 1 ANOTHER EMERGENCY DEPARTMENT  
2 A WALK-IN MEDICAL CLINIC  
3 A FAMILY DOCTOR'S OFFICE  
4 A PEDIATRICIAN'S OFFICE  
5 PUBLIC HEALTH CENTRE  
6 OTHER--SPECIFY \_\_\_\_\_

Q-28 Why did you choose to come here rather than to one of these other places?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q-29 Has your child had this or a similar illness or injury in the past? (Circle number)

- 1 NO  
2 YES

SKIP TO Q-31 ON  
THIS PAGE

Q-30 Where did you go to get help when your child had this illness or injury before? (Circle all that apply)

- 1 AN EMERGENCY DEPARTMENT  
2 A WALK-IN MEDICAL CLINIC  
3 A FAMILY DOCTOR'S OFFICE  
4 A PEDIATRICIAN'S OFFICE  
5 A PUBLIC HEALTH CENTRE  
6 OTHER--SPECIFY \_\_\_\_\_

Q-31 In the last 12 months, how many times have you seen your family doctor or pediatrician with your child? (if none, write "0") \_\_\_\_\_ TIMES

- Q-32 In the last 12 months, how many times have you taken your child to a walk-in medical clinic? (if none, write "0") \_\_\_\_\_ TIMES
- Q-33 In the last 12 months, how many times have you brought your child to this or another emergency department? (include this visit) \_\_\_\_\_ TIMES
- Q-34 In the last 12 months, how many times has anyone in your household come to an emergency department for help? (include this visit) \_\_\_\_\_ TIMES
- Q-35 How would you describe your child's overall health? (circle number)
- 1 GOOD
  - 2 FAIR
  - 3 POOR
- Q-36 Does your child have a chronic condition? (circle number)
- 1 NO
  - 2 YES-SPECIFY \_\_\_\_\_

Part 2

Finally, I would like to ask some questions which will give me a better picture of who filled out my questionnaire.

- Q-37 What is your sex? (Circle number)
- 1 MALE
  - 2 FEMALE
- Q-38 What is your age? \_\_\_\_\_ YEARS
- Q-39 What is the highest level of education that you have completed? (Circle number)
- 1 NO FORMAL EDUCATION
  - 2 PRIMARY SCHOOL
  - 3 JUNIOR HIGH SCHOOL
  - 4 HIGH SCHOOL
  - 5 NON-UNIVERSITY  
(VOC/TECH/NURSING SCHOOL)
  - 6 UNIVERSITY



Q-40 In total, how many years of schooling have you completed? \_\_\_\_\_ YEARS

Q-41 Are you presently? (Circle all that apply)

- 1 EMPLOYED FULL TIME
- 2 EMPLOYED PART TIME
- 3 UNEMPLOYED
- 4 IN SCHOOL
- 5 RETIRED
- 6 FULL-TIME HOMEMAKER
- 7 OTHER--SPECIFY \_\_\_\_\_

Q-42 What was your approximate household income from all sources, before taxes, in 1991? (Circle number)

- 1 LESS THAN \$20,000
- 2 \$20,000 to \$39,999
- 3 \$40,000 to \$59,999
- 4 \$60,000 to \$80,000
- 5 GREATER THAN \$80,000

Q-43 Number of people you have in each age group in your household (if none, write "0")

Number of people

\_\_\_\_\_ UNDER 5 YEARS OF AGE  
\_\_\_\_\_ 5 TO 9  
\_\_\_\_\_ 10 TO 14  
\_\_\_\_\_ 15 TO 19  
\_\_\_\_\_ 20 TO 24  
\_\_\_\_\_ 25 TO 34  
\_\_\_\_\_ 35 TO 44  
\_\_\_\_\_ 45 TO 54  
\_\_\_\_\_ 55 TO 64  
\_\_\_\_\_ 65 TO 74  
\_\_\_\_\_ 75+

Q-44 How long have you lived in Canada? \_\_\_\_\_ YEARS

Q-45 What country were you born in? \_\_\_\_\_

Q-46 What is your present marital status?  
(circle number)

- |   |                    |   |                            |
|---|--------------------|---|----------------------------|
| 1 | NEVER MARRIED      | → | SKIP TO Q-53<br>ON PAGE 10 |
| 2 | DIVORCED/SEPARATED | → |                            |
| 3 | WIDOWED            | → |                            |
| 4 | MARRIED            |   |                            |
| 5 | COMMON LAW         |   |                            |

Q-47 What is the age of your husband/wife/partner?  
\_\_\_\_\_ YEARS

Q-48 What is the highest level of education that  
your husband/wife/partner has completed?  
(Circle number)

- 1 NO FORMAL EDUCATION
- 2 PRIMARY SCHOOL
- 3 JUNIOR HIGH SCHOOL
- 4 HIGH SCHOOL
- 5 NON-UNIVERSITY  
(VOC/TECH/NURSING SCHOOL)
- 6 UNIVERSITY

Q-49 In total, how many years of schooling has  
your husband/wife/partner completed?  
\_\_\_\_\_ YEARS

Q-50 Is your husband/wife/partner presently?  
(Circle all that apply)

- 1 EMPLOYED FULL TIME
- 2 EMPLOYED PART TIME
- 3 UNEMPLOYED
- 4 IN SCHOOL
- 5 RETIRED
- 6 FULL-TIME HOMEMAKER
- 7 OTHER--SPECIFY \_\_\_\_\_

Q-51 How long has your husband/wife/partner lived  
in Canada? \_\_\_\_\_ YEARS

Q-52 What country was your husband/wife/partner  
born in? \_\_\_\_\_

Q-53 Is there anything else you would like to tell me about your decision to bring your child to the emergency department to-day? If so, please use this space for that purpose.

Your contribution to my study is greatly appreciated. If you would like to receive a summary of my results, please print your name and address on the form which is included in the envelope, seal it inside the small white envelope, which is in the brown envelope, and put it in one of the fluorescent orange boxes. Thank-you for taking part in my study.

## ਭਾਗ 1

ਸਹਾਇਤਾ ਦੇ ਇਹ ਭਾਗ ਉਸ ਬੱਚੇ ਬਾਰੇ ਹੈ ਜਿਸ ਨੂੰ ਅੱਜ ਤੁਸੀਂ ਟੌਰੀ  
ਇਲਾਜ ਨਹੀਂ ਅਸਪਸ਼ਟ ਦੇ ਟੌਰੀ ਇਲਾਜ ਵਿਭਾਗ (Emergency department)  
ਵਿੱਚ ਲਿਆਏ ਹੋ। ਅਗਰ ਤੁਸੀਂ ਇੱਥੇ ਤੋਂ ਟੱਥ ਬਚਿਆਂ ਨੂੰ ਵਖਾਣ ਨਹੀਂ  
ਲਿਆਏ ਤੋ ਤਾਂ ਜਰ ਬੱਚੇ ਨਹੀਂ ਵਖਾਣ ਸਹਾਇਤਾ ਨਾਮ ਤੁਹਾਨੂੰ ਮਿਲਿਆ  
ਹੋਵੇਗਾ। ਰਿਪਾ ਰਹੇ ਤੁਹਾਨੂੰ ਜਰ ਬੱਚੇ ਨਹੀਂ ਵਖਾਣ ਵਖਾਣ ਤੁਰਨਾ ਅਤੇ ਤੁਹਾਨੂੰ  
ਰੋਟਨ ਇੰਨੇ ਹੋ।

ਪ੍ਰਸ਼ਨ-1 ਤੁਸੀਂ ਇਸ ਬੱਚੇ ਦੇ ਕੀ ਨਗਦੇ ਹੋ (ਨਿਬਰ ਘੋਰ ਇਛਾ)

- 1 ਮਾਂ
- 2 ਪਿਤਾ
- 3 ਮਤਰੇਏ ਮਾਂ ਬਾਪ
- 4 ਰਖਵਾਲੇ
- 5 ਮਾਂ ਬਾਪ ਦੀ ਸਾਂ ਬਚਿਆਂ ਨੂੰ ਸਾਂਤਨ ਵਾਲੇ
- 6 ਜਾਂ ਹੋਰ ਕੋਈ ਵੈਰਣ ਇਛਾ

ਪ੍ਰਸ਼ਨ-2

ਕੀ ਤੁਸੀਂ ਬੱਚੇ ਨੂੰ ਅੱਜ ਇਸ ਟੌਰੀ ਇਲਾਜ ਕਰਨ ਵਾਲੇ ਵਿਭਾਗ ਵਿੱਚ  
ਇਕ ਨਹੀਂ ਲਿਆਏ ਹੋ ਜਿਸ ਵਿਭਾਗ ਵਿੱਚ ਕੰਮ ਕਰਦੇ ਤਾਕਤਰ ਨੇ ਤੁਹਾਨੂੰ  
ਆਖਿਆ ਸੀ ਕਿ ਵੇਖੋਗਾ ਜਾਂਚ ਨਹੀਂ ਬੱਚੇ ਨੂੰ ਲਿਆਉਣਾ ਜਾਂ

- 1 ਨਹੀਂ —————> ਕੁਝ ਵੇਖੋਗੇ ਤੇ ਪੁੱਛੋਗੇ
- 2 ਜਾਂ

ਪ੍ਰਸ਼ਨ-3 (ਅਗਰ ਟੌਰੀ ਇਲਾਜ ਵਿਭਾਗ ਦੇ ਤਾਕਤਰ ਨੇ ਟੌਰ ਅਨੁਭਵ ਨਹੀਂ  
ਆਖਿਆ ਸੀ) ਕੇਹੜੇ ਇਨ ਅਤੇ ਕੇਹੜੀ ਤਾਰੀਖ ਨੂੰ ਆਖੋਗੀ ਟੌਰ  
ਤੁਹਾਨੂੰ ਬੱਚਾ ਇਸ ਟੌਰੀ ਇਲਾਜ ਵਿਭਾਗ ਵਿੱਚ ਲਿਆਇਆ ਸੀ?

ਇਨ ਨੂੰ ਛੱਡ ਕੇ ਸੋਫਾ ਸੰਖ 16 ਤੇ ਪ੍ਰਸ਼ਨ 26 ਦੇਖੋ

ਪ੍ਰਸ਼ਨ-4

ਤੁਹਾਨੂੰ ਬੱਚੇ ਦੀ ਬੀਮਾਰੀ ਜਾਂ ਸੱਟ ਜਿਸ ਪ੍ਰਕਾਰ ਦੀ ਹੈ? (ਜਿਵੇਂ ਬੁਖਾਰ,  
ਖੰਗ, ਦਰਦ, ਖਰਸ਼, ਜ਼ਖਮ)

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ਪ੍ਰਸ਼ਨ-5 ਤੁਹਾਡੇ ਬਿਅਾਲ ਅਨੁਸਾਰ ਤੁਹਾਡੇ ਬੱਚੇ ਦੀ ਬੀਮਾਰੀ ਜਾਂ ਸੱਟ ਕਿਤਨੀ ਗੰਭੀਰ ਹੈ? (ਨੰਬਰ ਘੋਰੋ)

- |                |                         |
|----------------|-------------------------|
| 1 ਗੰਭੀਰ ਨਹੀਂ   | 3 ਬਹੁਤ ਗੰਭੀਰ            |
| 2 ਮਾਮੂਲੀ ਗੰਭੀਰ | 4 ਧੁਰੀਨ ਨਾਲ ਨਹੀਂ ਹਸ ਮਸਟ |

ਪ੍ਰਸ਼ਨ-6 ਪਹਿਲਾਂ ਰਿਸ ਨੇ ਹੋਖਿਆ ਕਿ ਤੁਹਾਡਾ ਬੱਚਾ ਬੀਮਾਰ ਸੀ ਜਾਂ ਸੱਟ ਲੱਗੀ (ਨੰਬਰ ਘੋਰੋ)

- |        |                       |
|--------|-----------------------|
| 1 ਮਾਂ  | 5 ਬੱਚੇ ਨੇ ਆਪ          |
| 2 ਪਿਤਾ | 6 ਅਧਿਆਪਕ              |
| 3 ਦਾਦੀ | 7 ਬੇਬੀ ਸਿਟਰ           |
| 4 ਦਾਦਾ | 8 ਜਾਂ ਰਿਸ਼ੇਸ਼-ਵਰਗੀਟੋ— |

ਪ੍ਰਸ਼ਨ-7 ਉਪਰੋਕਤ ਵਿੱਚੋਂ ਰਿਸ ਟਾਈਮ ਉਸ ਦੇ ਨੋਟਸ ਵਿੱਚ ਆਪਣਾ ਕਿ ਤੁਹਾਡਾ ਬੱਚਾ ਬੀਮਾਰ ਹੈ ਜਾਂ ਸੱਟ ਲੱਗੀ ਹੈ? (ਨੰਬਰ ਘੋਰੋ)

- |                              |                          |
|------------------------------|--------------------------|
| 1 4 ਮੰਦੇ ਤੋਂ ਅੱਟ ਸਮਾਂ ਪਹਿਲਾਂ | 5 1-2 ਹਫ਼ਤੇ ਪਹਿਲਾਂ       |
| 2 4-24 ਪਹਿਲੇ ਪਹਿਲਾਂ          | 6 3-4 ਹਫ਼ਤੇ ਪਹਿਲਾਂ       |
| 3 ਪਿਛਲੇ 2-3 ਦਿਨਾਂ ਵਿਚਕਾਰ     | 7 1 ਮਹੀਨੇ ਤੋਂ ਵੱਧ ਪਹਿਲਾਂ |
| 4 ਪਿਛਲੇ 4-7 ਦਿਨਾਂ ਵਿਚਕਾਰ     |                          |

ਪ੍ਰਸ਼ਨ-8 ਆਪਣੇ ਬੱਚੇ ਦੀ ਸ਼ਰਾਇਤ ਨਾਲ ਤੁਸੀਂ ਜਾਂ ਦਫ਼ਤਰ ਦੇ ਹੋਰ ਰਿਸੇ ਵਿਅਕਤੀ (ਦਫ਼ਤਰ ਦਾ ਅਰਥ ਹੈ ਸਾਰੇ ਵਿਅਕਤੀ ਜੋ ਤੁਹਾਡੇ ਨਾਲ ਦਫ਼ਤਰ ਹਾਂਗੇ ਵਿਥੇਠੇ ਵਿੱਚ ਜੀਅਰ ਵਿੱਚ ਹੀ ਰਹਿੰਦੇ ਹਨ) ਨੇ, ਉਸ ਨੂੰ ਤੁਰੰਤ ਇਲਾਜ ਵਾਲੇ ਇਤਫਾ ਵਿੱਚ (ਜ਼ਿਆਦਾ ਤੋਂ ਪਹਿਲਾਂ) ਦੀ ਜੁਝ ਵੀਤਾ (ਉਧਾਰਣ ਵਜੋਂ, ਜੀ ਬੱਚੇ ਨੂੰ ਵੋਈ ਟਰਾਈ ਵਿੱਚੀ ਸੀ (ਅਗਰ ਇੱਥੇ ਸੀ ਤਾਂ ਵੀ ਜੁਝ) ਵੇਰੀ ਖਾਸ ਖੁਰਾਕ, ਬਿਸਤਰੇ ਵਿੱਚ ਰੋਖਿਆ ਸੀ, ਅੱਰ ਵਿੱਚ ਰੋਖਿਆ, ਤਾਂ ਬਨਾਉਣ ਵਾਲੇ ਪਤੰਗ ਦੀ ਵਰਤੋਂ ਜਾਂ ਵੋਈ ਮਲਮ ਵਰਤੀ।

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ਪ੍ਰਸ਼ਨ-੧ ਤੀ ਤੁਹਾਡੇ ਅੱਧ ਫਲਪਤ ਦੇ ਤੋਗਾਂ (ਫੀਮਾਹੀ-ਆਂ) ਜਾਂ ਸੱਟ-ਵੇਟ  
ਥਾਹੇ ਕੋਈ ਪਤਾ ਵਾਲੀ ਰਿਤਾਬ ਜਾਂਹੋਈ ਹੋਰ ਲਿਖਤ ਹੈ? (ਨੰਬਰ ਘੋਰੋ)

1 ਨਹੀਂ → ਫੁਤਰੇ-ਇਸ ਸਟੇਟ ਪ੍ਰਸ਼ਨ 11 ਤੋਂ ਜਾਵੇ

2 ਜਾਂ

ਪ੍ਰਸ਼ਨ 11- ਤੀ ਤੁਸੀਂ ਜਾਂ ਘਰ ਦੇ ਜਿਨੇ ਹੋਰ ਵਿਅਕਤੀ ਨੇ ਇਹ ਵੇਸਟ  
ਰਹਨ ਤੋਂ ਪਹਿਲਾਂ ਜਿ ਚੱਚੇ ਨੂੰ ਪਿਛੇ ਸਹਾਇਤਾ ਦੇਣੀ ਹੈ ਉਸ ਸਿਤਾਬ  
ਜਾਂ ਲਿਖਤ ਨੂੰ ਪੜ੍ਹਿਆ? (ਨੰਬਰ ਘੋਰੋ)

1 ਨਹੀਂ

2 ਜਾਂ

ਪ੍ਰਸ਼ਨ 11- ਉਹੋਂ ਇਲਾਜ ਵਾਲੇ ਤਾਗ ਵਿੱਚ ਆਉਣ ਤੋਂ ਪਹਿਲਾਂ ਤੀ ਤੁਸੀਂ ਤਾਵਰਾਂ  
ਤੋਂ ਨਰਸਾਂ ਤੋਂ ਛੁੱਟੇ ਘੋਰ ਤੋਂ ਬਾਹਰ ਜਿਸ ਹੋਰ ਵਿਅਕਤੀ ਤੋਂ ਆਪਣੇ  
ਚੱਚੇ ਦੀ ਫੀਮਾਹੀ ਅਤੇ ਸੱਟ ਥਾਹੇ ਸਲਾਹ ਲਈ?

1 ਨਹੀਂ → ਫੁਟਰੇ (ਫੁਤ) ਤੋਂ ਪ੍ਰਸ਼ਨ 17 ਅਗਲੇ ਸਟੇਟ ਤੋਂ ਜਾਵੇ

2 ਜਾਂ

ਪ੍ਰਸ਼ਨ 12- ਹੋਰ ਜਿਨ੍ਹਾਂ ਤੋਂ ਤੁਸੀਂ ਪੁੱਛਿਆ (ਨੰਬਰ ਘੋਰੋ)

1 ਰਿਸ਼ਤੇਦਾਰ 3 ਪੜ੍ਹੇਸ਼ੀ (ਗੁਆਂਢੀ)

2 ਮਿੱਤਰ 4 ਹੋਰ ਕੋਈ - ਵੇਰਵਾ ਦੇਵੋ

ਪ੍ਰਸ਼ਨ-13 ਤੀ ਉਨ੍ਹਾਂ ਨੇ ਜਾਂ ਵੱਧ ਵਿੱਚੋਂ ਜਿਸੇ ਨੇ ਚੱਚੇ ਨੂੰ ਸਹਾਇਤਾ ਦੇਣ  
ਥਾਹੇ ਕੋਈ ਸੁਝਾਈ ਦਿੱਤੀ? (ਨੰਬਰ ਘੋਰੋ)

1 ਨਹੀਂ → ਫੁੱਟਰੇ ਅਗਲੇ ਸਟੇਟ ਤੋਂ ਪ੍ਰਸ਼ਨ 17 ਤੋਂ ਜਾਵੇ

2 ਜਾਂ

ਪ੍ਰਸ਼ਨ-14 ਤੀ ਸੁਝਾਈ ਦਿੱਤੇ ਗਏ ਸੀ?

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ਪ੍ਰਸ਼ਨ-15 ਕੀ ਉਨ੍ਹਾਂ ਇਹ ਸੁਸ਼ਰ੍ਰਿ ਦਿੱਤਾ ਕਿ ਆਖਣੇ ਸੱਚੇ ਨੂੰ ਹਸਪਤਾਲ ਦੇ ਤੁਰੰਤ ਇਲਾਜ ਵਾਲੇ ਵਿਭਾਗ ਵਿੱਚ ਲੈ ਜਾਣੇ ?

- 1 ਨਹੀਂ
- 2 ਹਾਂ

ਪ੍ਰਸ਼ਨ-16 ਕੀ ਉਨ੍ਹਾਂ ਤੁਹਾਨੂੰ ਬੱਚੇ ਲਈ ਸਹਾਇਤਾ ਲਈ ਕਿਸੇ ਹੋਰ ਥਾਂ ਤੇ ਜਾਣ ਲਈ ਤੀ ਸੁਸ਼ਰ੍ਰਿ ਦਿੱਤੇ ? (ਨੰਬਰ ਖੋਲ੍ਹੋ)

- 1 ਨਹੀਂ
- 2 ਹਾਂ - ਉਹ ਥਾਵਾਂ ਦੱਸੋ

ਪ੍ਰਸ਼ਨ-17 ਅੱਜ ਬੱਚੇ ਨੂੰ ਹਸਪਤਾਲ ਦੇ ਤੁਰੰਤ ਇਲਾਜ (Emergency Department) ਵਾਲੇ ਵਿਭਾਗ ਵਿੱਚ ਲੈ ਜਾਣ ਲਈ ਕਿਸਨੇ ਘਰ ਵਿੱਚੋਂ ਫੈਸਲਾ ਕੀਤਾ ? (ਨੰਬਰ ਖੋਲ੍ਹੋ)

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|----------------------------|------------------------------|
| 1 ਬੱਚੇ ਦੀ ਮਾਂ ਨੇ           | 4 ਬੱਚੇ ਦੇ ਸਪੁਸ਼ਟ ਨੇ          |
| 2 ਸੱਚੇ ਦੇ ਪਿਤਾ ਨੇ          | 5 ਬੱਚੇ ਦੇ ਪਾਲਣ ਪੋਸ਼ਣ ਵਾਲੇ ਨੇ |
| 3 ਬੱਚੇ ਦੇ ਮਤਰੇਏ ਮਾਂ ਬਾਪ ਨੇ | 6 ਹੋਰ ਕਿਸੇ ਨੇ - ਵੇਖਣਾ ਦਿਓ -  |

ਪ੍ਰਸ਼ਨ-18 ਬੱਚੇ ਨੂੰ ਅੱਜ ਕਿਸੇ ਨਿਆਉਣ ਤੋਂ ਪਹਿਲਾਂ ਕੀ ਤੁਰੰਤ ਇਲਾਜ ਵਾਲੇ ਵਿਭਾਗ ਨੂੰ ਫੋਨ ਕੀਤਾ ਸੀ ? (ਨੰਬਰ ਖੋਲ੍ਹੋ)

- 1 ਨਹੀਂ —> ਫੋਨ ਦੇ ਪ੍ਰਸ਼ਨ 20 ਅਗਲੇ ਸਫੇਤੇ ਜਾਣ
- 2 ਹਾਂ

ਪ੍ਰਸ਼ਨ-19 ਜਦ ਤੁਸੀਂ ਫੋਨ ਕੀਤਾ ਤੁਹਾਨੂੰ ਕੀ ਦਰਨ ਲਈ ਆਖਿਆ ਗਿਆ ਸੀ ?

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ਪ੍ਰਸ਼ਨ-20 ਕੀ ਤੁਹਾਡੇ ਬੱਚੇ ਦਾ ਕੋਈ ਫੈਮਲੀ ਤਾਕਟਰ ਜਾਂ ਬਚਿਆਂ ਦਾ ਤਾਕਟਰ ਹੈ? (ਨੰਬਰ ਘੋਰੋ)

- 1 ਨਹੀਂ
- 2 ਹਾਂ

ਛੱਤ ਕੇ ਇਸੇ ਸਟੇ ਤੇ ਪ੍ਰਸ਼ਨ 24 ਤੇ ਜਾਵੋ

ਪ੍ਰਸ਼ਨ-21 ਅੱਜ ਤੁਰੰਤ ਇਨਾਸ ਹਾਲੇ ਇਤਾਗ ਵਿੱਚ ਆਉਣ ਤੋਂ ਪਹਿਲਾਂ ਕੀ ਤੁਸੀਂ ਬੱਚੇ ਦੇ ਫੈਮਲੀ ਤਾਕਟਰ ਜਾਂ ਬਚਿਆਂ ਦੇ ਤਾਕਟਰ ਨੂੰ ਫੋਨ ਕੀਤਾ ਸੀ? (ਨੰਬਰ ਘੋਰੋ)

- 1 ਨਹੀਂ
- 2 ਹਾਂ - ਫੈਮਲੀ ਤਾਕਟਰ
- 3 ਹਾਂ - ਬਚਿਆਂ ਦਾ ਤਾਕਟਰ

ਛੱਤ ਕੇ ਇਸੇ ਸਟੇ ਤੇ ਪ੍ਰਸ਼ਨ 24 ਤੇ ਜਾਵੋ

ਪ੍ਰਸ਼ਨ-22 ਜਦ ਫੋਨ ਕੀਤਾ ਸੀ ਉਨ੍ਹਾਂ ਵਿੱਚੋਂ ਕੋਈ ਮਿਲਿਆ ਸੀ ਤੇ ਕੀ ਸਲਾਹ ਦਿਤੀ? (ਨੰਬਰ ਘੋਰੋ)

- 1 ਨਹੀਂ
- 2 ਹਾਂ

ਛੱਤ ਕੇ ਇਸੇ ਸਟੇ ਤੇ ਪ੍ਰਸ਼ਨ 24 ਤੇ ਜਾਵੋ

ਪ੍ਰਸ਼ਨ-23 ਤੁਸੀਂ ਕਿਸ ਨਾਲ ਗੱਲ ਕੀਤੀ ਅਤੇ ਉਨ੍ਹਾਂ ਤੁਹਾਨੂੰ ਕੀ ਆਖਿਆ?

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ਪ੍ਰਸ਼ਨ-24 ਜਦੋਂ ਦਾ ਤੁਹਾਡਾ ਬੱਚਾ ਬੀਮਾਰ ਹੋਇਆ ਜਾਂ ਸੱਟ ਹੁੱਤੀ ਸੀ ਉਸ ਨੂੰ ਕਿਸੇ ਹੋਰ ਸਾਂ ਸਹਾਇਤਾ ਲਈ ਲੈ ਗਏ ਸੀ? (ਨੰਬਰ ਘੋਰੋ)

- 1 ਨਹੀਂ
- 2 ਹਾਂ

ਛੱਤ ਕੇ ਅਗਲੇ ਸਟੇ ਤੇ ਪ੍ਰਸ਼ਨ 26 ਤੇ ਜਾਵੋ

ਪ੍ਰਸ਼ਨ-25 ਹੋਰ ਕਿਸੇ ਗਏ ਅਤੇ ਕਦ?

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ਪ੍ਰਸ਼ਨ-26 ਅਜ ਹਸਪਤਾਲ ਦੇ ਤੁਰੰਤ ਇਲਾਜ ਵਾਲੇ ਵਿਤਾਗ ਵਿੱਚ ਆਉਣ ਤੋਂ ਪਹਿਲਾਂ ਆਪਣੇ ਬੱਚੇ ਨੂੰ ਉਸ ਦੀ ਯੀਮਾਰੀ ਜਾਂ ਸੱਟ ਨੁਕਸਾਨ ਕਿਸੇ ਹੋਰ ਸਾਂ ਵਖਾਉਣ ਜਾਂ ਹੋਰਗਾ ਵਖਾਉਣ ਬਾਰੇ ਕੀ ਤੁਸੀਂ ਵਿਚਾਰ ਕੀਤੀ (ਨੰਬਰ ਘੋਰ)

1 ਨਹੀਂ —————> ਛੱਡ ਕੇ ਇਸ ਸਟੇ ਦੇ ਪ੍ਰਸ਼ਨ 27 ਤੇ ਜਾਓ

2 ਜਾਂ

ਪ੍ਰਸ਼ਨ-27 ਰੋਹੜੀਆਂ ਹੋਰ ਬਾਵਾਂ ਬਾਰੇ ਤੁਸੀਂ ਵਿਚਾਰ ਕੀਤੀ? (ਉਹ ਸਭ ਘੋਰ)

1 ਕਿਸੇ ਹੋਰ ਹਸਪਤਾਲ ਦੇ ਸੈਰਟ ਇਲਾਜ ਵਿਤਾਗ

2 ਹਸਪਤਾਲ ਜਿਥੇ ਜ਼ਖ਼ਮ ਚਗੇ ਜਾ ਸਕੇ 4 ਬੱਚਿਆਂ ਦੇ ਤੁਰੰਤ ਪਾਸ

3 ਟੈਮਨੀ ਤਾਰਟਰ ਦੇ ਟਰਟਰ

5 ਨੋਰਸਿਹਤ ਸੈਂਟਰ

6 ਹੋਰ-ਵੇਰਵਾ ਦਿਓ

ਪ੍ਰਸ਼ਨ-28 ਹੋਰ ਯਾਂ ਜਾਣ ਦੀ ਬਜਾਏ ਤੁਸੀਂ ਇੱਥੇ ਰਿਹਾਓ?

ਪ੍ਰਸ਼ਨ-29 ਕੀ ਪਹਿਲਾਂ ਤੀ ਕਦੇ ਤੁਹਾਡੇ ਬੱਚੇ ਨੂੰ ਇਹ ਜਾਂ ਅਜੇਹੀ ਕੋਈ ਸੱਮਸਿਆ (p. 64m) ਹੋਈ ਸੀ?

1 ਨਹੀਂ —————> ਛੱਡ ਕੇ ਇਸ ਸਟੇ ਦੇ ਪ੍ਰਸ਼ਨ 30 ਤੇ ਜਾਓ

2 ਜਾਂ

ਪ੍ਰਸ਼ਨ-30 ਪਹਿਲਾਂ ਜਦੋਂ ਤੁਹਾਡੇ ਬੱਚੇ ਨੂੰ ਅਜੇਹੀ ਸੱਮਸਿਆ ਆਈ ਸੀ ਤਾਂ ਕਿਸੇ ਗੱਲ (ਸਬੰਧਤ ਨੰਬਰ ਘੋਰ)

1. ਤੁਰੰਤ ਇਲਾਜ ਵਿਤਾਗ

4. ਟਰਟਰ ਬੱਚਿਆਂ ਦੇ ਤੁਰੰਤ ਪਾਸ

2. ਹਸਪਤਾਲ ਜਿਥੇ ਜ਼ਖ਼ਮ ਚਗੇ ਜਾ ਸਕੇ

5. ਨੋਰਸਿਹਤ ਸੈਂਟਰ

3. ਟਰਟਰ ਟੈਮਨੀ ਤਾਰਟਰ

6. ਹੋਰ-ਵੇਰਵਾ ਦਿਓ

ਪ੍ਰਸ਼ਨ-31 ਪਿਛਲੇ 12 ਮਹੀਨਿਆਂ ਵਿੱਚ ਤੁਸੀਂ ਆਪਣੇ ਬੱਚੇ ਨੂੰ ਸਿਤਲੀ ਵੇਰ ਟੈਮਨੀ ਤਾਰਟਰ ਜਾਂ ਬੱਚਿਆਂ ਦੇ ਤਾਰਟਰ ਪਾਸ ਲੈ ਕੇ ਗਏ? (ਅਗਰ ਕਦੀ ਨਹੀਂ ਤਾਂ 'ਹ' ਲਿਖੋ) — ਹੇਠ।

ਪ੍ਰਸ਼ਨ-32 ਪਿਛਲੇ 12 ਮਹੀਨਿਆਂ ਵਿੱਚ ਤੁਸੀਂ ਕਿਤਨੀ ਵਾਰ ਆਪਣੇ ਬੱਚੇ ਨੂੰ  
ਉਸ ਹਸਪਤਾਲ ਲੈ ਕੇ ਗਏ ਜੋ 24 ਘੰਟੇ ਖੁੱਲ੍ਹਾ ਰਹਿੰਦਾ ਅਤੇ ਜੱਦ ਚਾਹੇ  
ਉਸੇ ਥਾਂ ਸੌ (ਅਗਰ ਕਦੇ ਨਹੀਂ, ਲਿਖੋ '0') — ਵਾਰ

ਪ੍ਰਸ਼ਨ-33 ਪਿਛਲੇ 12 ਮਹੀਨਿਆਂ ਵਿੱਚ ਕਿਤਨੀ ਵਾਰ ਆਪਣੇ ਬੱਚੇ ਨੂੰ ਇਸ ਜਾਂ  
ਜਿਸੇ ਹੋਰ ਸੰਬੰਧ ਵਿਸ਼ਾਜ ਵਿੱਤਾਗ ਵਿੱਚ ਤੁਸੀਂ ਲੈ ਕੇ ਆਏ? (ਇਸ ਵਾਰ ਸਮੇਤ  
ਜੁੱਲ ਲਿਖੋ) — ਵਾਰ

ਪ੍ਰਸ਼ਨ-34 ਪਿਛਲੇ 12 ਮਹੀਨਿਆਂ ਵਿੱਚ ਤੁਹਾਡੇ ਘਰ ਵਿੱਚ ਕੋਈ ਵਿਅਕਤੀ ਕਿਤਨੀ ਵਾਰ  
ਸਹਾਇਤਾ ਲਈ ਹਸਪਤਾਲ ਦੇ ਸੰਬੰਧਿਤ ਵਿਤਾਗ ਵਿੱਚ ਆਇਆ।  
(ਇਸ ਵਾਰ ਸਮੇਤ ਜੁੱਲ ਲਿਖੋ) — ਵਾਰ

ਪ੍ਰਸ਼ਨ-35 ਤੁਹਾਡੇ ਬੱਚੇ ਦੀ ਸਮੁੱਚੇ ਤੌਰ 'ਤੇ ਸਿਹਤ ਕੈਸੀ ਹੈ? (ਨਿਬਰ ਘੇਰੋ)

1. ਚੰਗੀ
2. ਦਰਮਿਆਨੀ
3. ਮਾੜੀ

ਪ੍ਰਸ਼ਨ-36 ਕੀ ਤੁਹਾਡੇ ਬੱਚੇ ਨੂੰ ਕੋਈ ਖੁਰਾਕੀ ਤਕਲੀਫ਼ ਹੈ? (ਨਿਬਰ ਘੇਰੋ)

1. ਨਹੀਂ
2. ਹਾਂ - ਵੇਰਵਾ ਦਿਉ

## ਭਾਗ 2

ਅਖੀਰ ਵਿੱਚ ਮੈਂ ਦੁਸ਼ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਚਾਹੁੰਦੀ ਹਾਂ, ਜਿਨ੍ਹਾਂ ਤੋਂ ਮੈਨੂੰ ਚੰਗੀ ਤਰ੍ਹਾਂ ਪਤਾ  
ਲੱਗ ਸਕੇ ਕਿ ਇਸ ਨੇ ਮੇਰਾ ਇਹ ਸਵਾਲਨਾਮਾ ਮੁਕੰਮਲ ਕੀਤਾ।

ਪ੍ਰਸ਼ਨ-37 ਤੁਹਾਡਾ ਲਿੰਗ ਕੋਈ (sex) ਕੀ ਹੈ? (ਨਿਬਰ ਘੇਰੋ)

1. ਪੁਰਸ਼
2. ਇਸਤਰੀ

ਪ੍ਰਸ਼ਨ-38 ਤੁਹਾਡੀ ਉਮਰ ਕੀ ਹੈ? — ਸਾਲ

ਪ੍ਰਸ਼ਨ-39 ਦੱਸੋ ਤੋਂ ਵੱਧ ਤੁਸੀਂ ਕਿਸੇ ਤੱਕ ਪੜ੍ਹਾਈ ਕੀਤੀ (ਨਿਬਰ ਘੇਰੋ)

- |                                |                        |
|--------------------------------|------------------------|
| 1. ਬਾਰਾਇਰ ਕੋਈ ਪੜ੍ਹਾਈ ਨਹੀਂ ਕੀਤੀ | 4. ਹਾਈ ਸਕੂਲ            |
| 2. ਪਾਇਲਟ ਤੱਕ                   | 5. ਯੂਨੀਵਰਸਟੀ ਤੋਂ ਬਿਨਾਂ |
| 3. ਯੂਨੀਅਰ ਹਾਈ ਸਕੂਲ             | 6. ਯੂਨੀਵਰਸਟੀ           |

ਪ੍ਰਸ਼ਨ-40 ਕੁੱਲ ਸਿਤਰੇ ਸਾਲ ਤੁਸੀਂ ਘੜਾਈ ਕੀਤੀ? — ਸਾਲ

ਪ੍ਰਸ਼ਨ-41 ਸੀ ਤੁਸੀਂ ਹੁਣ? (ਜੇਬਤ ਨੰਬਰ ਘੋਰੇ)

- |                                |                          |
|--------------------------------|--------------------------|
| 1. ਸਾਗਾ ਟਾਈਮ ਕੰਮ ਕਰਦੇ ਹੋ       | 5. ਪੈਨਸ਼ਨੀਆ ਜਾਂ ਰਿਟਾਇਰੇ  |
| 2. ਟੁੱਛ ਟਾਈਮ(ਸਮਾਂ) ਕੰਮ ਕਰਦੇ ਹੋ | 6. ਸਾਗਾ ਸਮਾਂ ਘਰ ਹੀ ਸਾਂਝੇ |
| 3. ਕੰਮ ਤੇ ਨਹੀਂ ਜੁੱਗੇ ਹੋ        | 7. ਹੋਰ ਕੋਈ-ਵੇਰਾ/ਦਿਉ      |
| 4. ਸਕੂਲ ਜਾਂਦੇ ਹੋ               |                          |

ਪ੍ਰਸ਼ਨ-42 ਵੈਰਸ ਹੋਣ ਤੋਂ ਪਹਿਲਾਂ 1991 ਵਿੱਚ ਸਾਰਿਆਂ ਪਾਮਿਉ ਰਸਾ ਕੇ ਘਰ ਦੀ ਕੁੱਲ ਸਿਤਰੀ ਆਮਦਨ ਸੀ? (ਜੇਬਤ ਨੰਬਰ ਘੋਰੇ)

- |                               |                           |
|-------------------------------|---------------------------|
| 1. 20,000 ਤਾਲਰ ਤੋਂ ਘੱਟ        | 4. 60,000 ਤੋਂ 80,000 ਤਾਲਰ |
| 2. 20,000 ਤੋਂ 39,999 ਤਾਲਰ ਤੱਕ | 5. 80,000 ਤਾਲਰ ਤੋਂ ਵੱਧ    |
| 3. 40,000 ਤੋਂ 59,999 ਤਾਲਰ ਤੱਕ |                           |

ਪ੍ਰਸ਼ਨ-43 ਤੁਹਾਡੇ ਘਰ ਵਿੱਚ ਹਰ ਉਮਰ ਦੇ ਜਿਤਰੇ ਵਿਆਹੁਤੀ ਹਨ (ਅਗਰ ਕੋਈ ਨਹੀਂ ਲਿਖੋ '0')

ਵਿਆਹੁਤੀਆਂ ਦੀ ਗਿਣਤੀ

|                   |        |          |         |
|-------------------|--------|----------|---------|
| 5 ਸਾਲ ਤੋਂ ਘੱਟ ਉਮਰ |        |          |         |
| _____ 5           | ਤੋਂ 9  | _____ 55 | ਤੋਂ 64  |
| _____ 10          | ਤੋਂ 14 | _____ 65 | ਤੋਂ 74  |
| _____ 15          | ਤੋਂ 19 | _____ 75 | ਤੋਂ ਉਪਰ |
| _____ 20          | ਤੋਂ 24 |          |         |
| _____ 25          | ਤੋਂ 34 |          |         |
| _____ 35          | ਤੋਂ 44 |          |         |
| _____ 45          | ਤੋਂ 54 |          |         |

ਪ੍ਰਸ਼ਨ-44 ਤੁਸੀਂ ਕੜਤਾ ਵਿੱਚ ਸਿਤਰੇ ਸਮੇਂ ਤੋਂ ਕੀਤੀ ਹੋ? — ਸਾਲ

ਪ੍ਰਸ਼ਨ-45 ਕੋਹ ਤੋਂ ਦੇਸ (ਮੁਲਕ ਵਿੱਚ) ਤੁਸੀਂ ਜਨਮ ਲਿਆ?



ਪ੍ਰਸ਼ਨ-46 ਵਿਹਾ ਸਥਿਤੀ ਇਸ ਵੇਲੇ ਤੁਹਾਡੀ ਕੀ ਪੌਰੀਸ਼ਨ ਹੈ? (ਨਿਬਰ ਘੇਰੋ)

1. ਕਈ ਤੀ ਵਿਆਹ ਨਹੀਂ ਹੋਇਆ —————>

2. ਵਿਆਹ ਮਗਰੋਂ ਛੁੱਟ ਛੁੱਟ ਹੋ ਚੁੱਕਾ ਹੈ —————>

3. ਪਤੀ ਜਾਂ ਪਤਨੀ ਦੀ ਮੌਤ ਹੋ ਚੁੱਕੀ ਹੈ —————>

ਫੁੱਟ ਨੇ ਸਫਾ 20 ਤੇ  
ਪ੍ਰਸ਼ਨ 51 ਤੇ ਜਾਵੋ

4. ਵਿਆਹੀਆ (ਸਾਈਸਟਾ)

5. ਪ੍ਰਕ੍ਰਿਤ ਵਿਧਾਨ ਜਾਂ ਵਿਵਾਹੀ ਰਾਸ਼ੀ ਅਨੁਸਾਰ ਇਹਨੇ ਗਹਿਣਾ

ਪ੍ਰਸ਼ਨ-47 ਤੁਹਾਡੇ ਪਤੀ/ਪਤਨੀ/ਸਾਥੀ ਦੀ ਉਮਰ ਕਿਤਨੀ ਹੈ? — ਸਾਲ

ਪ੍ਰਸ਼ਨ-48 ਤੁਹਾਡੇ ਪਤੀ/ਪਤਨੀ/ਸਾਥੀ ਦੀ ਹੱਥ ਤੋਂ ਹੱਥ ਤਾਨੀਮ (ਪੜ੍ਹਾਈ) ਕਿਤਨੀ  
ਹੈ ਜੋ ਉਸ ਪੁਰੀ ਕੀਤੀ (ਨਿਬਰ ਘੇਰੋ)

1. ਕੋਈ ਪੜ੍ਹਾਈ ਨਹੀਂ ਕੀਤੀ

4. ਗਈ ਸਕੂਲ ਤੋਂ

2. ਪ੍ਰਾਇਮਰੀ ਤੋਂ

5. ਬਿਨਾਂ ਪ੍ਰਾਇਮਰੀ-ਰਿਤ/ਭਰੀ  
ਨਗਰੀ ਸਕੂਲ

3. ਦੂਜੀਆਂ ਗਈ ਸਕੂਲ ਤੋਂ

6. ਪ੍ਰਾਇਮਰੀ

ਪ੍ਰਸ਼ਨ-49- ਤੁਹਾਡੇ ਪਤੀ/ਪਤਨੀ/ਸਾਥੀ ਨੇ ਕਿਤਨੇ ਸਾਲ ਪੜ੍ਹਾਈ ਮੁਕੰਮਲ ਕੀਤੀ? — ਸਾਲ

ਪ੍ਰਸ਼ਨ-50- ਕੀ ਤੁਹਾਡਾ ਪਤੀ/ਪਤਨੀ/ਸਾਥੀ ਗੁਣ? (ਸਥਿਤੀ ਨਿਬਰ ਘੇਰੋ)

1. ਸਾਰੇ ਟਾਈਮ ਨਹੀਂ ਰੰਮ ਕਰਦਾ/ਕਰਦੀ ਹੈ

2. ਕੋਈ ਸਮੇਂ ਟਾਈਮ (part time) ਰੰਮ ਤੇ ਨਹੀਂ ਹੈ

3. ਰੰਮ ਤੇ ਨਹੀਂ

4. ਸਕੂਲ ਜਾਣਾ/ਜਾਂਦੀ ਹੈ

5. ਪੈਨਸ਼ਨ ਤੇ ਹੈ/ਰਿਟਾਇਰ ਹੋ ਚੁੱਕਾ/ਚੁੱਕੀ ਹੈ

6. ਘਰ ਨੂੰ ਹੀ ਸਾਂਤਵਾ/ਸਾਂਤਵੀ ਹੈ

7. ਹੋਰ ਕੁਝ — ਵੇਰਵਾ ਦਿਓ

ਪ੍ਰਸ਼ਨ-51- ਤੁਹਾਡਾ ਪਤੀ/ਪਤਨੀ/ਸਾਥੀ ਕਿਤਨੇ ਸਮੇਂ ਤੋਂ ਕੰਮ ਤੇ ਵਿੱਚ ਕੰਮ ਰਿਹਾ ਹੈ?

ਸਾਲ

ਪ੍ਰਸ਼ਨ-52- ਤੁਹਾਡੇ ਪਤੀ/ਪਤਨੀ/ਸਾਥੀ ਕੋਲੋਂ ਦੇਸ਼ ਅਥਵਾ ਮੁਲਕ ਵਿੱਚ ਪੈਰਾ ਹੋਇਆ?



# 第一部分

問題表的這一部分詢問您今天帶來急診室就醫的孩子的一些情況。如果您帶來一個以上孩子就醫，每個小孩將有一份問題表，請在第一部分為每個孩子分別填寫。第二部分只需填寫一次。

問題一。您是這孩子的 (畫圈)

1. 母親
2. 父親
3. 繼父母
4. 監護人
5. 養父母
6. 其他 (請說明) \_\_\_\_\_

問題二。您今天帶孩子來急診室，是否因為急診室醫生叫您孩子來復查，或做進一步治療？ (畫圈)

1. 不是 → 請看本頁問題四

2. 是的

問題三 (如果醫生告訴你們來急診室復查或治療)，你孩子上次來急診室是哪一天？星期幾？ \_\_\_\_\_

現在請接看問題 第二十六 (第二十六頁)

問題四。您孩子疾病或損傷的性質是什麼？ (例如：發燒，咳嗽，疼痛，皮疹，刀傷)。

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問題五. 您認為孩子疾病或受傷的嚴重性如何? (畫圈)

1. 不嚴重
2. 中等程度嚴重
3. 非常嚴重
4. 我不能肯定

問題六. 誰先注意到您孩子的病或傷? (畫圈)

1. 母親      2. 父親      3. 祖母      4. 祖父
5. 孩子自己   6. 老師      7. 照顧孩子的保姆
8. 其他人 -- 請說明 \_\_\_\_\_

問題七. 上述人何時首先注意到孩子病了或受傷了? (畫圈)

1. 不到 4 小時前
2. 4 - 24 小時前
3. 過去 2-3 天內
4. 過去 4-7 天內
5. 1-2 周前
6. 3-4 周前
7. 一個月前

問題八. 在決定來急診室之前, 您或家庭其他成員(家庭成員指所有和您住在一起的人)曾給孩子在家做了些什麼? (比如: 給孩子吃藥(如吃過的藥, 吃了什麼藥), 特殊飲食, 臥床休息, 呆在家里, 搽藥膏).

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問題九. 您們家中有關兒童疾病或受傷的讀物嗎? (畫圖)

1. 沒有 —————→ 接著本頁問題十一

2. 有

↓ 問題十. 您或家庭其他成員曾參照書上的內容決定該如何幫助孩子了嗎? (畫圖)

1. 沒有

2. 是的

問題十一. 您來急診室前有沒有問過其他人 (非家庭成員), (非醫生或護士) 關於您孩子的傷或病?

1. 沒有 —————→ 接著下頁問題十七

2. 問過

↓ 問題十二. 您問過什麼人?

1. 親戚

2. 朋友

3. 鄰居

4. 其他 —— 請說明 \_\_\_\_\_

問題十三. 那些人向您或您家庭成員建議過該如何幫助孩子?

1. 沒有 —————→ 接著下頁問題十七

2. 是的

↓ 問題十四. 他們提過哪些建議?

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問題十五. 他們曾建議您送孩子到急診室來嗎? (畫圈)

1. 沒有
2. 是的

問題十六. 他們曾建議過讓你們去其他可以得到幫助的地方嗎?

(畫圈)

1. 沒有
2. 是的 -- 請說明哪些地方

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問題十七. 今天您家庭中何人決定您帶孩子到急診室來的? (畫圈)

1. 孩子的母親
2. 孩子的父親
3. 孩子的繼父母
4. 孩子的監護人
5. 孩子的養父母
6. 其他 -- 請說明

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問題十八. 您今天帶孩子來看急診前曾給急診室打過電話嗎? (畫圈)

1. 沒有 ———→ 接看下頁問題二十
2. 打過

↓ 問題十九. 您打電話時, 您被告知做些什麼?

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問題二十. 您孩子有家庭醫生或兒科醫生嗎? (畫圈)

1. 沒有 → 接看本頁問題二十四

2. 有的

↓ 問題二十一. 您們今天來看急診前給孩子的家庭醫生或兒科醫生打過電話嗎? (畫圈)

1. 沒有 → 接看本頁問題第二十四

2. 打過 — 家庭醫生

3. 打過 — 兒科醫生

↓ 問題二十二. 當您給他/她打電話時, 您是否能夠和某個能給您指示的人談話? (畫圈)

1. 沒有 → 接看本頁問題二十四

2. 談過

↓ 問題二十三. 您和誰談話? 他/她指示您做什麼?

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問題二十四. 從您孩子生病或受傷開始, 他/她被帶到其他地方去尋找過幫忙嗎? (畫圈)

1. 沒有 → 接看下頁問題二十六

2. 有過

↓ 問題二十五. 您們去過什麼地方? 什麼時候?

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問題二十六. 今天來看急診前, 您想過帶孩子去其他地方看病或傷, 或復診嗎? (畫圈)

1. 沒有 ——> 接看本頁問題二十九

2. 想過

問題二十七. 您想過去其他什麼地方? (在每個適合處畫圈)

- |              |                 |
|--------------|-----------------|
| 1. 另一個急診室    | 2. 不需預約的門診所     |
| 3. 一個家庭醫生辦公室 | 4. 一個兒科醫生辦公室    |
| 5. 公共保健中心    | 6. 其他——請說明_____ |

問題二十八. 為什麼您選擇此急診室而不是去上述任何其他地方?

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問題二十九. 您孩子過去患過此病/傷或相似的病/傷嗎? (畫圈)

1. 沒有 ——> 接看本頁問題三十一

2. 患過

問題三十. 以前孩子患此病/傷時您們去哪兒看過病? (在每個去過的地方畫圈)

- |                 |               |
|-----------------|---------------|
| 1. 一個急診室        | 2. 一個不需預約的門診所 |
| 3. 一個家庭醫生辦公室    | 4. 一個兒科醫生辦公室  |
| 5. 一個公共保健中心     |               |
| 6. 其他——請說明_____ |               |

問題三十一. 過去十二個月中, 您帶孩子去看過幾次家庭醫生或兒科醫生? (如沒有, 寫“0”)

\_\_\_\_\_次.

問題三二. 過去十二個月中, 您帶孩子去過幾次不需預約的門診所? (如沒有, 寫0) \_\_\_\_\_ 次.

問題三三. 過去十二個月中, 您帶孩子去過幾次急診室? (包括此次) \_\_\_\_\_ 次.

問題三四. 過去十二個月中, 您家庭成員去過幾次急診室就診? (包括此次) \_\_\_\_\_ 次.

問題三五. 您認為您孩子的基本健康狀況如何? (畫圈)

1. 好
2. 一般
3. 差

問題三六. 您孩子是否患慢性病症? (畫圈)

1. 無
2. 有 -- 請說明 \_\_\_\_\_

## 第二部分

最後, 我想問一些問題以便更加瞭解填表人的狀況.

問題三七. 您的性別? (畫圈)

1. 男
2. 女

問題三八. 您的年齡? \_\_\_\_\_ 歲

問題三九. 您的最高學歷? (畫圈)

1. 未受過正規教育
2. 小學
3. 初中
4. 高中
5. 專科
6. 大學

問題四十一. 總共您受過多少年學校教育? \_\_\_\_\_ 年

問題四十二. 您目前: (在所有合適處畫圈)

- |                  |           |
|------------------|-----------|
| 1. 全日工作          | 2. 部分鐘點工作 |
| 3. 失業            | 4. 上學     |
| 5. 退休            | 6. 全日家庭主婦 |
| 7. 其他——請說明 _____ |           |

問題四十三. 1991年, 您全家扣稅前的全部收入? (畫圈)

1. 少於 \$ 20,000
2. \$ 20,000 — \$ 39,999 之間
3. \$ 40,000 — \$ 59,999 之間
4. \$ 60,000 — \$ 80,000 之間
5. 多於 \$ 80,000.

問題四十四. 您家庭成員各年齡的人數: (如無, 寫“0”)

- |       |        |
|-------|--------|
| _____ | 5歲以下   |
| _____ | 5-9歲   |
| _____ | 10-14歲 |
| _____ | 15-19歲 |
| _____ | 20-24歲 |
| _____ | 25-34歲 |
| _____ | 35-44歲 |
| _____ | 45-54歲 |
| _____ | 55-64歲 |
| _____ | 65-74歲 |
| _____ | 75歲以上  |

問題四十五. 您在加拿大生活了多長時間? \_\_\_\_\_ 年

問題四十六. 您在哪個國家出生? \_\_\_\_\_

問題四十六. 您目前的婚姻狀況? (畫圈)

1. 從未結過婚

2. 離婚 / 分居

3. 寡居

4. 結婚

5. 同居

接看第三十頁上問題  
五十三

問題四十七. 您配偶的年齡? \_\_\_\_\_ 歲

問題四十八. 您配偶的最高學歷是什麼? (畫圈)

1. 未受過正規教育

2. 小學

3. 初中

4. 高中

5. 專科 (如護校, 技校)

6. 大學

問題四十九. 總共您配偶受過多少年學校教育? \_\_\_\_\_ 年.

問題五十. 您配偶目前是? (在所有合適處畫圈).

1. 全日工作

2. 部分鐘點工作

3. 失業

4. 上學

5. 退休

6. 全日家庭主婦

7. 其他 -- 請說明 \_\_\_\_\_

問題五十一. 您配偶在加拿大生活了多少年? \_\_\_\_\_ 年

問題五十二. 您配偶在哪个國家出生? \_\_\_\_\_

問題五三 有關今日您決定帶孩子來急診室的事，除了以上你提供的資料外，你還有什麼可以告訴我的？請寫在下面空白紙上。

我非常感謝您對我的研究的幫助，如果您想要一份我的研究結果報告，請把您姓名地址寫在信封裡夾的一張表格，並將此表格封入小白信封中，然後將信封投入鮮橘黃色箱內。感謝您參與我的研究。



### Appendix C - Information Sheet

Hello, my name is Corrine Truman. I am a master's student in the Faculty of Nursing at the University of Alberta. I am interested in finding out what things parents do before deciding to bring their children to an emergency department. In order to do this, I invite you to fill out this questionnaire, which will take you about 20 minutes. Whether or not you decide to do so will in no way affect your child's treatment in this emergency department today or in the future.

If you decide to fill out this questionnaire, you can do it here in the waiting area (the admission clerk has extra pens if you need one), or you can take it with you to the treatment area if you get called in before you are finished. Please do not put your name on the questionnaire or on the envelope. When you have finished the questionnaire, seal it in the brown envelope and put it in one of the three fluorescent orange boxes in the emergency department. You can find them at the admission clerk's desk and at the two nursing desks. Feel free to keep this information sheet.

If you feel that you cannot complete this questionnaire before you are given more information, please print your name and telephone number on the form in the brown envelope, seal it inside the small white envelope (which is in your brown envelope) and put it in one of the fluorescent orange boxes. Then take the unfinished questionnaire home with you. I will telephone you so that I can arrange to meet you to answer your questions before you complete the questionnaire.

If you feel that you do not want to complete this questionnaire please return it to me by putting it in one of the fluorescent orange boxes.

If you complete this questionnaire, I will also be looking at your child's (children's) emergency chart(s) after you leave. When I do this I will be looking at your address so I can get an approximate idea of how far you have travelled to come to the hospital, and I will be recording your child's age and the doctor's diagnosis. There is no risk involved in taking part in this study, and at no time will either your name, your child's name, or your address be connected to this study.

If you need to contact me about this study you can telephone me at 464-0875, or my supervisor, Dr. Linda Reutter at 492-5909.

## ਹਰਪਤਾਲ ਵਿੱਚ ਟੋਰੀਇਲਾਜ ਕਰਨ ਵਾਲੇ ਵਿਭਾਗ ਵਿੱਚ ਇਲਾਜਾਂ ਬੱਚਿਆਂ ਸਬੰਧੀ ਜਾਣਕਾਰੀ ਪਤਰ

ਹੈਲੋ, ਮੇਰਾ ਨਾਮ ਕੋਰੀਨ ਟਰੂਮੈਨ (CORRINE TRUMAN) ਹੈ। ਮੈਂ ਅਲਬਰਟਾ ਯੂਨੀਵਰਸਟੀ ਦੇ ਰੋਜ਼ੀ ਸ਼ਵਰਾ ਇੰਦਿਆ ਵਿਭਾਗ ਵਿੱਚ ਅਤਿ ਉੱਤਮ (Masters) ਡਿਗਰੀ ਲੈਣ ਲਈ ਬਿੰਦਿਆਰਬਨ ਹਾਂ। ਮੈਂ ਇਹ ਜਾਨਣਾ ਚਾਹੁੰਦੀ ਹਾਂ ਕਿ ਟੋਰੀ ਇਲਾਜ ਲਈ ਆਪਣੇ ਬੱਚਿਆਂ ਨੂੰ ਬਿਆਉਣ ਤੋਂ ਪਹਿਲਾਂ ਉਨ੍ਹਾਂ ਦੇ ਮਾਂ ਬਾਪ ਕੀ ਕੁਝ ਕਰਦੇ ਹਨ। ਇਹ ਜਾਨਣ ਲਈ ਮੈਂ ਤੁਹਾਨੂੰ ਇੱਕ ਸਵਾਲਨਾਮਾ ਭੇਜ ਰਹੀ ਹਾਂ ਜਿਸ ਵਿੱਚ ਤੁਹਾਡੇ ਤਕਰੀਬਨ 20 ਮਿੰਟ ਲੱਗਣਗੇ। ਅਗਰ ਤੁਸੀਂ ਇਹ ਨਾ ਤੀ ਭੇਜਣਾ ਚਾਹੋ ਤਾਂ ਇਸ ਟੋਰੀ ਇਲਾਜ ਕਰਨ ਵਾਲੇ ਵਿਭਾਗ ਵਿੱਚ, ਅੱਜ ਜਾਂ ਆਉਣ ਵਾਲੇ ਸਮੇਂ ਤੁਹਾਡੇ ਬੱਚੇ ਦੇ ਇਲਾਜ ਤੋਂ ਕੋਈ ਅਸਰ ਨਹੀਂ ਪਵੇਗਾ।

ਅਗਰ ਤੁਸੀਂ ਇਹ ਸਵਾਲਨਾਮਾ ਭੇਜਣਾ ਚਾਹੋ ਤਾਂ ਉਤਰ ਕਰਨ ਵਾਲੀ ਥਾਂ ਬੈਠ ਕੇ ਭਰ ਸਕਦੇ ਹੋ (ਅਗਰ ਬੈਠਣ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਹਰਪਤਾਲ ਵਿੱਚ ਦਾਖਲ ਕਰਨ ਵਾਲੇ ਕਰਮਚਾਰੀ ਪਾਸੋਂ ਲੈ ਸਕਦੇ ਹੋ) ਜਾਂ ਜਦ ਤੁਹਾਨੂੰ ਅੰਦਰ ਸੁਣਿਆ ਜਾਵੇਗਾ ਉਸ ਸਮੇਂ ਭਰ ਲੈਣਾ। ਟਿੱਪਣੀ ਕਰੋ ਸਵਾਲਨਾਮੇਂ ਜਾਂ ਲਫਾਏ ਤੇ ਆਪਣਾ ਨਾਂ ਨਾ ਲਿਖਣਾ। ਜਦ ਤੁਸੀਂ ਸਵਾਲਨਾਮੇਂ ਪੂਰਾ ਕਰ ਲਵੋ ਤਾਂ ਇਸ ਨੂੰ ਖਾਕੀ ਰੰਗ ਦੇ ਲਟਾਟੇ ਵਿੱਚ ਬੰਦ ਕਰਕੇ ਐਮਰਜੈਂਸੀ (ਟੋਰੀ ਇਲਾਜ) ਵਿਭਾਗ ਵਿੱਚ ਸੰਗਤਰੀ ਰੰਗ ਦੇ ਡਿੱਕੇ ਲਵ ਕੇ ਬਕਸਿਆਂ ਵਿੱਚੋਂ ਇਸੇ ਵਿੱਚ ਪਾ ਦੇਵੋ। ਇਹ ਬਕਸੇ ਹਰਪਤਾਲ ਵਿੱਚ ਦਾਖਲ ਕਰਨ ਵਾਲੇ ਕਰਮਚਾਰੀ ਦੇ ਤੈਸਰ ਅਤੇ ਦੋ ਨਰਸਾਂ ਦੇ ਤੈਸਰਾਂ ਤੇ ਰੱਖੇ ਜਾਂਦੇ ਹਨ। ਇਸ ਸਵਾਲਨਾਮੇਂ ਦੀ ਕਾਪੀ ਤੁਸੀਂ ਘਰ ਲਿਆ ਸਕਦੇ ਹੋ।

ਇਹ ਸਵਾਲਨਾਮਾ ਭੇਜਣ ਲਈ ਅਗਰ ਹੋਰ ਜਾਣਕਾਰੀ ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਆਪਣੇ ਨਾਮ ਅਤੇ ਫੋਨ ਨੰਬਰ ਤੇ ਨਿਖ ਦੇਵੋ ਜੋ ਫਾਰਮ ਖਾਕੀ ਲਫਾਟੇ ਵਿੱਚ ਹੈ। ਅਤੇ ਉਸ ਨੂੰ ਸੇਵੇਂ ਫੋਟੋ ਲਫਾਟੇ ਵਿੱਚ ਬੰਦ ਕਰ ਦੇਵੋ (ਚਿੱਟਾ ਲਟਾਟਾ ਖਾਕੀ ਲਟਾਟੇ ਵਿੱਚ ਹੈ) ਅਤੇ ਉਸ ਨੂੰ ਇੱਕ ਸੰਗਤਰੀ ਰੰਗ ਦੇ ਬਕਸੇ ਵਿੱਚ ਪਾ ਦੇਵੋ। ਅਤੇ ਖਾਕੀ ਸਵਾਲਨਾਮੇਂ ਘਰੋਂ ਨਾ ਜਾਵੇ। ਮੈਂ ਤੁਹਾਨੂੰ ਮਿਲਣ ਲਈ ਫੋਨ ਕਰਾਂਗੀ ਤਾਂ ਜੋ ਸਵਾਲਨਾਮੇਂ ਭੇਜਣ ਤੋਂ ਪਹਿਲਾਂ ਤੁਹਾਡੇ ਸਵਾਲਾਂ ਦਾ ਉੱਤਰ ਦੇਵਾਂ।

ਅਗਰ ਤੁਸੀਂ ਇਹ ਸਵਾਲਨਾਮਾ ਭੇਜਣਾ ਨਹੀਂ ਚਾਹੁੰਦੇ ਤਾਂ ਜਿਸੇ ਵਿੱਚ ਸੰਗਤਰੀ ਰੰਗ ਦੇ ਬਕਸੇ ਵਿੱਚ ਪਾ ਦੇਵੋ।

ਅਗਰ ਤੁਸੀਂ ਇਹ ਸਵਾਲਨਾਮਾ ਭਰਿਆ ਹੈ ਤਾਂ ਤੁਹਾਡੇ ਚੁਣੇ ਜਾਣ  
ਪਿੱਛੇ ਤੀ ਮੈਂ ਤੁਹਾਡੇ ਬੱਚੇ (ਬਚਿਆਂ) ਦੇ ਅੰਮਰਜੋਤਸਵੀ (ਦੌਹੀ/ਇਲਾਜ) ਦੇ ਚਾਰਟ  
ਨੂੰ ਤੀ ਵੇਖਣੀ ਚਾਹੀਂਗੀ। ਇਹ ਚਾਰਟ ਵੇਖਣ ਸਮੇਂ ਤੁਹਾਡੇ ਇੱਕੋ ਅੰਤਰੈਸ ਤੋਂ  
ਮੈਂ ਅੰਦਾਜ਼ਾ ਲਗਾ ਸਕਾਂਗੀ ਕਿ ਹਸਪਤਾਲ ਅਪ੍ਰਕਟ ਲਈ ਤੁਹਾਨੂੰ ਕਿਤਨਾ ਸਟਰ  
ਦਰਨਾ ਪਿਆ। ਮੈਂ ਤੁਹਾਡੇ ਬੱਚੇ ਦੀ ਉਮਰ ਅਤੇ ਰੋਗ ਸਬੰਧੀ ਡਾਕਟਰ ਦੀ ਗਵੇ  
ਅਤੇ ਤਸਬੀਸ਼(ਜੰਗ) ਤੀ ਨੋਟ ਕਰਾਂਗੀ। ਇਸ ਪੜ੍ਹਾਈ ਅਤੇ ਜਾਣਕਾਰੀ ਦੇਣ ਇੱਥੇ  
ਕੋਈ ਖਤਰਾ ਨਹੀਂ ਅਤੇ ਜਦੋਂ ਤੀ ਤੁਹਾਡੇ ਨਾਮ, ਜਾਂ ਤੁਹਾਡੇ ਬੱਚੇ ਦਾ ਨਾਮ ਜਾਂ ਤੁਹਾਡੇ  
ਅੰਤਰੈਸ ਦੀ ਸਬੰਧਤਾ ਇਸ ਪੜ੍ਹਾਈ ਨਾਲ ਨਹੀਂ ਕੀਤੀ ਜਾਏਗੀ।

ਇਸ ਪੜ੍ਹਾਈ ਜਾਂ ਜਾਣਕਾਰੀ ਸਬੰਧੀ ਅਗਰ ਮੇਰੇ ਨਾਲ ਸੰਪਰਕ ਕਰਨ  
ਦੀ ਲੋੜ ਪਵੇ ਤਾਂ ਫੋਨ 464-0875 ਤੇ ਮੈਨੂੰ ਜਾਂ ਮੇਰੇ ਸੁਪਰਵਾਈਜ਼ਰ ਡਾਕਟਰ  
ਲਿੰਡਾ ਰਿਊਟਰ (Dr. LINDA Reutter) ਨੂੰ ਫੋਨ 492-5909 ਤੇ ਫੋਨ ਕਰੋ।

## 兒童在急診室——填表指南

您好！我叫 Corrine Trassman，我是亞省大學護理系碩士研究生，我有興趣瞭解家長們在決定送孩子到急診室就診之前，他們通常會做些什麼。為此目的，我邀請您填寫這張問題表，這將花費您 20 分鐘時間，您決定填寫與否，並不影響您孩子今天或將來在本急診室的治療。

如果您決定填寫此表，您可在候診室填寫（需筆的話，接診員處備有）。您也可以輪到您孩子就診時填寫，請不要在問題表或信封上填寫姓名。當您填完後，請把問題表封入棕色信封，然後投入急診室內三個鮮橘黃色箱其中之一。這些箱子就放在急診室接診員的桌子和二個護理桌上。如果您想要，可保留這填表指南。

如果填表前您需要瞭解更多的情況，請在棕色信封內的其中一表格，填上您的姓名和電話號碼，並將此表格封入白色小信封中（這白色小信封就在棕色信封內），並將白信封投入三個鮮橘黃色箱的其中之一，然後將未填寫完的問題表帶回家，我將給您打電話安排時間見您，以便能在您填表前回答您的問題。

如果您不想填寫，請將此表放入鮮橘黃色箱其中之一。

如果您填完此表，在您走後我還要讀您孩子的急診記錄。在我讀急診記錄時，我也會查您的地址，這樣我大約知道您到這醫院有多遠。同時我會記錄您孩子的年齡和醫生診斷。此研究對您及孩子無任何不利之處。並且，您和您孩子的姓名及家庭住址均不會被本研究報告引用。

如果您想就此研究期間與我聯繫，請打電話給我。我的電話是：4640875；或者打電話給我的指導教師 Dr. Linda Reutter，她的電話是：4925909。

**Appendix D - Recording Sheet**

Questionnaire  
Number

Sticker

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



**Appendix E - Guidelines for Triage Patients to  
Emergency from Admitting Without an Emergency Chart**

Patients presenting with the following, are to be sent to emergency and documentation done at the bedside or with family members or significant others who can offer information.

Chest pain unless the patient is in no distress possibly due to muscle strains, bruised ribs, no shortness of breath, may be documented in admitting if patient states is able to.

Shortness of Breath if the patient is unable to speak in sentences, pauses for breath between words. May be due to severe asthma, chronic obstructive pulmonary disease, or heart attack. Other indications of severe distress: diaphoretic (excessive sweating), cyanosis (bluish tinge to mouth, finger tips or ear lobes), disorientation, feeling faint.

Active Bleeding that is not controlled. If dressings are applied and they are not arresting bleeding. Patient may be pale, diaphoretic, disorientated or feeling faint. Bleeding may be internal. Patient may present demonstrating the above symptoms of shock. If the bleeding is controlled by a dressing, patient can give information at admitting. If the patient is obviously in distress from a minor wound, or in a lot of pain, or has no means to control the bleeding send them to emergency.

Seizures if they have a history of seizure (uncontrolled muscular movement) at home or active seizure activity now.

Children who have a temperature greater than 40 celsius, if they are having seizure activity or a history of seizure activity, if they have shortness of breath, or a persistent (bark) cough, vomiting and/or diarrhea, if they are lethargic, pale, unresponsive, have taken an overdose or if the parents are very distraught and worried.

Psychiatric Patients who are disrupting other patients in the waiting room are to be seated if willing in the emergency interview room. If family members or significant others present, have them wait with patient while you inform a nurse (NEVER leave patients if possible telephone emergency for assistance) If patient expresses suicidal thoughts do not leave unattended escort to emergency.

Severe Pain: If patient is doubling over, moaning or groaning.

Pregnancy: If patient is over 5 months pregnant they are to be seen in the case room if their condition permits (seems alert and orientated, able to give history without apparent distress). If they report any bleeding or any unusual signs bring them to emergency. If patient is less than 5 months pregnant and in distress (seems pale, diaphoretic, disorientated, or in severe pain) bring them to emergency.

Confused or disorientated: All patients presenting with confusion or disorientation which is new to significant others bring to emergency.

Transporting patients from admitting to emergency:

- (a) All patients complaining of: chest pain, shortness of breath, faintness, severe pain, or exhibiting signs of shock (pale, diaphoretic, disorientated) should not be allowed to walk to the emergency, transport via wheelchair.
- (b) All patients complaining of injuries which may affect ambulatory status, ie. strains, fractures should be transported by wheelchair.
- (c) All patients exhibiting confusion or incoordination should be transported by wheelchair.
- (d) If transportation by wheelchair not feasible, contact nursing staff for assistance.

# Appendix F - Workload Measurement Classification System

|                                                 |   |
|-------------------------------------------------|---|
| CV Cardio-Vascular                              |   |
| 01 Acute MI v/s unstable .....                  | 5 |
| 02 Aortic Aneurysm with dissection.....         | 5 |
| 03 Angina.....                                  | 3 |
| 04 Angina-unstable.....                         | 4 |
| 05 Arrhythmias.....                             | 4 |
| 06 ASHD (Atherosclerotic heart disease).....    | 3 |
| 07 Cardiogenic Shock.....                       | 5 |
| 08 Cardiac Arrest.....                          | 5 |
| 09 Congestive Heart Failure.....                | 4 |
| 10 Chest Pain-NYD.....                          | 3 |
| 11 Deep Vein Thrombosis.....                    | 3 |
| 12 Hypertension/hypotension.....                | 3 |
| 13 Hypertensive Crisis.....                     | 5 |
| 14 Hypovolemic Shock.....                       | 5 |
| 15 MI-stable.....                               | 4 |
| 16 Pericarditis.....                            | 3 |
| 17 Pulmonary Edema.....                         | 4 |
| 18 Severe chest pain-NYD.....                   | 4 |
| 19 Severe chest pain-with major discomfort..... | 4 |
| 20 Syncope: vertigo, weakness.....              | 3 |
| 21 TIA-transient ischemic attacks.....          | 3 |
| 25 Shock-hypovolemic.....                       | 5 |
| 26 Shock-toxic.....                             | 5 |
| 27 Shock-septic.....                            | 5 |
| 28 Uncontrolled/severe bleed.....               | 4 |
| 99 No Code                                      |   |
| CN Central Nervous System                       |   |
| 01 Altered LOC.....                             | 4 |
| 02 Cerebral Vascular Accident .....             | 4 |
| 03 Dementia.....                                | 3 |
| 04 Epilepsy-seizures.....                       | 3 |
| 05 Epilepsy-post seizure.....                   | 3 |
| 06 Status epilepticus.....                      | 5 |
| 07 Head Injury-no LOC.....                      | 2 |
| 08 Head Injury-secondary to ^ICP.....           | 4 |
| 09 Head Injury with LOC (awake).....            | 3 |
| 10 Head Injury with life-threatening ^ICP.....  | 5 |
| 11 Headache-etiology unknown.....               | 3 |
| 12 Headache-nonspecific.....                    | 1 |
| 13 Headache-migraine.....                       | 2 |
| 14 Headache-LOC-nontrauma or OD related.....    | 5 |
| 15 Meningitis.....                              | 4 |

|                                      |   |
|--------------------------------------|---|
| 16 Seizure (1st time or NYD).....    | 4 |
| 17 Skull Fracture-simple linear..... | 2 |
| 22 Skull Fracture-depressed.....     | 3 |
| 18 Subarachnoid hemorrhage.....      | 4 |
| 19 Syncope/Vertigo.....              | 3 |
| 21 Unconscious/comatose.....         | 4 |
| 99 No Code                           |   |

## EE EAR

|                           |   |
|---------------------------|---|
| 01 Otitis media.....      | 1 |
| 02 Cerumen Impaction..... | 1 |
| 03 Foreign Body.....      | 1 |

## EE EENT-Bleeding

|                                |   |
|--------------------------------|---|
| 05 Epistaxis-v/s stable.....   | 3 |
| 06 Epistaxis-v/s unstable..... | 4 |
| 07 T & A Bleed.....            | 4 |
| 08 Post Dental Bleed.....      | 4 |

## EE EENT-Eye

|                                              |   |
|----------------------------------------------|---|
| 31 Chemical Corrosive burns.....             | 3 |
| 32 Conjunctivitis.....                       | 1 |
| 33 Corneal Abrasions.....                    | 1 |
| 34 Detached Retina.....                      | 3 |
| 35 Foreign Body.....                         | 1 |
| 36 Non-chemical/nonpenetrating injuries..... | 1 |
| 37 Imbedded Contact Lens.....                | 3 |
| 38 Hyphema.....                              | 3 |
| 39 Penetrating Injury.....                   | 3 |

## EE EENT Facial Trauma

|                                  |   |
|----------------------------------|---|
| 40 Fx Facial bones-stable.....   | 1 |
| 41 Fx Facial bones-unstable..... | 4 |
| 42 Fx Nose.....                  | 1 |
| 99 No Code                       |   |

## GI Gastro-Intestinal

|                                 |   |
|---------------------------------|---|
| 01 Abdominal Pain.....          | 3 |
| 02 Appendicitis.....            | 3 |
| 03 Bowel Obstruction/ileus..... | 4 |
| 04 Crohn's Disease.....         | 3 |
| 05 Constipation.....            | 1 |
| 06 Dialysis-shunt problem.....  | 3 |
| 07 Food Poisoning.....          | 3 |
| 08 Foreign Body Ingested.....   | 1 |
| 09 Gastroenteritis.....         | 3 |

|    |                                 |   |
|----|---------------------------------|---|
| 10 | Gall Bladder Disease.....       | 3 |
| 11 | GI Bleed-v/s stable.....        | 3 |
| 12 | GI Bleed-v/s unstable.....      | 4 |
| 13 | Intestinal Infections.....      | 3 |
| 14 | Intussusception-child.....      | 4 |
| 16 | Pancreatitis-acute.....         | 4 |
| 17 | Pancreatitis-chronic.....       | 3 |
| 23 | Stomach Ache; gas problem.....  | 1 |
| 30 | Vomiting and/or Diarrhea.....   | 1 |
| 31 | V&D with dehydration-adult..... | 3 |
| 32 | V&D with dehydration-child..... | 4 |
| 99 | No Code                         |   |

#### GU Genital Urinary

|    |                                   |   |
|----|-----------------------------------|---|
| 01 | Pyelonephritis.....               | 3 |
| 02 | Sexual Assault/Rape.....          | 4 |
| 03 | Sexually Transmitted Disease..... | 1 |
| 04 | Torsion Testicle.....             | 3 |
| 05 | TURP-Post Op Bleed.....           | 3 |
| 06 | Urethritis-non specific.....      | 1 |
| 07 | Urinary Retention.....            | 3 |
| 08 | Urinary Tract Infection.....      | 1 |
| 09 | Renal Colic.....                  | 3 |
| 99 | No Code                           |   |

#### GY Gynecology & Obstetrics

|    |                                    |   |
|----|------------------------------------|---|
| 01 | Ectopic Pregnancy.....             | 4 |
| 02 | Emergency Childbirth.....          | 4 |
| 03 | Foreign Body Vagina.....           | 1 |
| 04 | Menstrual Cramps.....              | 1 |
| 05 | Pelvic Inflammatory Disease.....   | 3 |
| 06 | Placenta praevia/abruptio.....     | 5 |
| 07 | Pregnancy Test.....                | 1 |
| 08 | Pregnancy Complications-major..... | 4 |
| 09 | Postpartum Bleed.....              | 5 |
| 10 | Ruptured Pregnant Uterus.....      | 5 |
| 11 | Ruptured Ectopic Pregnancy.....    | 5 |
| 12 | Vaginal Bleed-v/s stable.....      | 3 |
| 13 | Vaginal Bleed-v/s unstable.....    | 4 |
| 99 | No Code                            |   |

#### IN Integumentary

|    |                        |   |
|----|------------------------|---|
| 01 | Bites and Stings.....  | 3 |
| 02 | Burns-1st deg/20%..... | 1 |
| 03 | Burns-2nd deg/10%..... | 2 |
| 04 | Burns-2nd deg/40%..... | 3 |



|                                                   |   |
|---------------------------------------------------|---|
| 05 Burns-3rd deg<20%.....                         | 4 |
| 06 Burns-3rd deg>20%.....                         | 5 |
| 07 Burns Chemical.....                            | 3 |
| 10 Cellulitis.....                                | 3 |
| 11 Foreign Body Removal.....                      | 2 |
| 12 I&D Abscess.....                               | 3 |
| 13 Infection Surgical Incision.....               | 3 |
| 20 Lacerations-minor.....                         | 2 |
| 21 Lacerations-major.....                         | 4 |
| 22 Lacerations-extensive blood loss.....          | 5 |
| 23 Suturing 5-15 minutes.....                     | 2 |
| 24 Suturing Extensive (less than 30 minutes)..... | 4 |
| 25 Suture Removal.....                            | 1 |
| 14 Rashes .....                                   | 1 |
| 15 Scabies and Lice .....                         | 1 |
| 16 Scratches and Contusion.....                   | 1 |
| 99 No Code                                        |   |

#### ME Metabolic Endocrine

|                                           |   |
|-------------------------------------------|---|
| 01 Allergic Reactions.....                | 1 |
| 02 Allergic Reaction with SOB.....        | 4 |
| 03 Anaphylactic Shock.....                | 5 |
| 13 Anemia.....                            | 3 |
| 14 Carcinomas.....                        | 3 |
| 20 Diabetes and Related Problems.....     | 3 |
| 21 Diabetic Ketoacidosis.....             | 4 |
| 30 Excessive High Fever > 40 celsius..... | 5 |
| 22 Insulin Shock.....                     | 3 |
| 31 Heat Stroke.....                       | 5 |
| 32 Hypothermia.....                       | 5 |
| 99 No Code                                |   |

#### OF Orthopedic

|                                                  |   |
|--------------------------------------------------|---|
| 01 Amputation-digits.....                        | 3 |
| 02 Amputation-major limbs(complete/partial)..... | 5 |
| 04 Strains and Strains.....                      | 1 |
| 10 Arthritis Pain.....                           | 1 |
| 11 Back-cervical distress.....                   | 2 |
| 12 Back-injury with spinal cord.....             | 4 |
| 13 Back-lower back injury.....                   | 1 |
| 14 Back-pain, acute strain or chronic pain.....  | 1 |
| 15 Back-thoracic spine injury.....               | 5 |
| 16 Back-spinal shock.....                        | 5 |
| 03 Bursitis.....                                 | 1 |



## OF Fractures

|    |                                         |   |
|----|-----------------------------------------|---|
| 20 | Cervical Spine full or limited ROM..... | 4 |
| 21 | Cervical spine-no ROM.....              | 5 |
| 22 | Cervical spine suspected.....           | 3 |
| 23 | Displaced or dislocated joint.....      | 3 |
| 24 | Clavicle (simple).....                  | 2 |
| 25 | Compound (limbs).....                   | 4 |
| 26 | Extremities (closed).....               | 3 |
| 27 | Fingers and Toes (simple).....          | 1 |
| 28 | Multiple (with trauma).....             | 4 |
| 29 | Pelvis.....                             | 4 |
| 30 | Ribs (simple).....                      | 2 |
| 31 | Ribs (multiple).....                    | 3 |
| 99 | No Code                                 |   |

## OT Other

|    |                                   |   |
|----|-----------------------------------|---|
| 00 | Blood Transfusion/IV Therapy..... | 3 |
| 01 | Chemotherapy.....                 | 3 |
| 02 | Dental Problems.....              | 1 |
| 03 | Dead on Arrival.....              | 1 |
| 04 | Employee Physical.....            | 1 |
| 06 | Placement Problems.....           | 4 |
| 07 | Prescheduled Appointments.....    | 1 |
| 08 | Dressing Changes.....             | 1 |
| 09 | Removal of Rings.....             | 1 |
| 10 | Routine Medical Treatment.....    | 1 |
| 99 | No Code                           |   |

## PS Psychiatry

|    |                                   |   |
|----|-----------------------------------|---|
| 01 | Acute Schizophrenic Reaction..... | 4 |
| 02 | Anxiety.....                      | 3 |
| 10 | Assault-abusive type.....         | 4 |
| 11 | Family Violence Victim.....       | 1 |
| 20 | Attempted Suicide.....            | 4 |
| 21 | Depression.....                   | 3 |
| 22 | Hyperventilation.....             | 3 |
| 23 | Manic State.....                  | 4 |
| 24 | Violent, Homicidal.....           | 5 |
| 99 | No Code                           |   |

## RE Respiratory

|    |                                            |   |
|----|--------------------------------------------|---|
| 00 | Asthma with ARF.....                       | 4 |
| 01 | Asthma without ARF.....                    | 3 |
| 02 | Asthma status asthmaticus.....             | 5 |
| 21 | Aspiration of a foreign body with SOB..... | 3 |
| 22 | Aspiration and/or coughing.....            | 1 |

|                                        |                                                  |   |
|----------------------------------------|--------------------------------------------------|---|
| 31                                     | Bronchitis-acute.....                            | 3 |
| 32                                     | Bronchitis-chronic.....                          | 1 |
| 33                                     | Congestion: cold, cough, URTI.....               | 1 |
| 34                                     | Croup.....                                       | 3 |
| 35                                     | COPD PO2>60.....                                 | 3 |
| 36                                     | COPD PO2<60.....                                 | 4 |
| 37                                     | Epiglottitis.....                                | 5 |
| 40                                     | Flail Chest.....                                 | 5 |
| 38                                     | Foreign Body in Nose.....                        | 1 |
| 41                                     | Fractured Larynx from trachea.....               | 5 |
| 42                                     | Hemothorax-without decompensation.....           | 4 |
| 43                                     | Hemothorax-with decompensation.....              | 5 |
| 51                                     | Inhalation of Toxic Fumes(minor symptoms).....   | 1 |
| 52                                     | Inhalation of Toxic Fumes(major symptoms).....   | 4 |
| 53                                     | Inhalation of Carbon Monoxide.....               | 3 |
| 54                                     | Inhalation of smoke.....                         | 4 |
| 60                                     | Pneumonia.....                                   | 4 |
| 44                                     | Pneumothorax.....                                | 5 |
| 45                                     | Pneumothorax-tension with SOB.....               | 5 |
| 70                                     | Respiratory Arrest/Failure.....                  | 5 |
| 81                                     | SOB on coughing.....                             | 1 |
| 82                                     | SOB on exertion.....                             | 3 |
| 83                                     | SOB-unknown etiology.....                        | 3 |
| 84                                     | SOB-associated with foreign body.....            | 3 |
| 91                                     | URTI-without fever.....                          | 1 |
| 92                                     | URTI-with fever <39.....                         | 2 |
| 93                                     | URTI-with fever >39.....                         | 3 |
| 94                                     | URTI-with febrile related seizure.....           | 3 |
| 99                                     | No Code                                          |   |
| SA Medical or Chemical Substance Abuse |                                                  |   |
| 01                                     | Alcohol abuse/withdrawal.....                    | 3 |
| 02                                     | Drug Abuse.....                                  | 3 |
| 12                                     | Drug Abuse-Rx fills.....                         | 1 |
| 20                                     | Overdose-accidental-no complications.....        | 3 |
| 21                                     | Overdose-toxic substance-unstable.....           | 4 |
| 22                                     | Overdose-all unconscious OD.....                 | 5 |
| 99                                     | No Code                                          |   |
| TR Trauma                              |                                                  |   |
| 01                                     | Penetrating chest/abdominal wound.....           | 5 |
| 02                                     | Multiple Systems Trauma-v/s unstable.....        | 5 |
| 03                                     | Multiple Systems Trauma-patient unconscious..... | 5 |
| 99                                     | No Code                                          |   |



University of Alberta  
Edmonton

Faculty of Nursing

Canada T6G 2G3

3rd Floor Clinical Sciences Building

**Certification of Ethical Acceptability for Research Involving  
Human Subjects**

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**NAME OF APPLICANT:** Corrine Truman, MN Candidate

**TITLE OF PROJECT:** "Use of the Emergency Department by the Non-Urgent  
Pediatric Patient"

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The members of the review committee, having examined the application for the above-named project, consider the procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

December 3, 1991  
Date

Anne Neufeld  
A. Neufeld, RN, PhD  
Chair  
Ethics Review Committee

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The Ethics Review Committee is a Joint Committee of  
The Faculty of Nursing, University of Alberta  
and  
The Nursing Division, University of Alberta Hospitals



**The General Hospital  
(Grey Nuns) of Edmonton**

159

111 Street and Jasper Avenue Edmonton, Alberta T5K 0L4 (403) 482-8111

December 19, 1991

Ms. Corrine Truman  
585 Cottonwood Avenue  
Sherwood Park, Alberta  
T8A 1Y5

Dear Ms. Truman:

I am very pleased to confirm that the Research Steering Committee of the Board of the General Hospital (Grey Nuns) of Edmonton has approved your research project "Use of the Emergency Department by the Non-Urgent Pediatric Patient" at their December 19, 1991.

We would appreciate a report to our Committee upon completion of this project and, if it is a lengthy project, an interim report would be appropriate. It would also be appreciated if credit would be given to the hospital and its Research Committee in publications when appropriate. All financial arrangements must be submitted to and approved by Mr. Joe Shaver, Acting Senior Vice President, Support Services of the hospital.

If you have any questions please do not hesitate to contact me. You can page me at the Grey Nuns Hospital or leave a message with the Research Committee secretary, Holly, at 450-7434.

Yours truly,

Dr. G.F. MacDonald  
Chairman, Research Steering Committee

/hc